DOCUMENT RESUME

ED 038 541 52 VT 010 883

AUTHOR MacArthur, Earl W.
TITLE Improving Vocational Education in Post-High School Institutions. Final Report.
INSTITUTION State Univ. of New York, Delhi. Agricultural and Technical Coll.
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO BR-9-0329
PUB DATE Feb 70
GRANT OEG-0-9-420329-3751(725)
NOTE 249p.

EDRS PRICE EDRS Price MF-$1.00 HC-$12.55
DESCRIPTORS Administrative Policy, Curriculum Development, *Educational Administration, Educational Facilities, Financial Policy, *Institutes (Training Programs), *Post Secondary Education, Program Improvement, Staff Improvement, Student Characteristics, Student Personnel Services, Teacher Improvement, *Technical Education, *Vocational Education

ABSTRACT

Four ongoing programs in postsecondary vocational-technical education were examined in a national institute attended by 59 representatives from 31 states. Institutions reporting programs were: (1) Los Angeles Trade and Technical College, California, (2) Washtenaw Community College, Ann Arbor, Michigan, (3) Rockingham Community College, Wentworth, North Carolina, and (4) State University Agricultural and Technical College, Alfred, New York. Topics covered for each institution included: (1) administrative structure, (2) curriculum development, (3) student recruitment and characteristics, (4) student personnel services, (5) facility design and development, and (6) financing. Using the 16 conference objectives as a guide, study groups reported recommendations for improvement of post-high school vocational education. Evaluation was accomplished by a structured questionnaire from all participants and by written evaluations from four regional representatives. Speech and group discussion, texts, and sample conference forms and materials are appended. (SB)

ED038541

BR 9-0329
PA 52
VT
(cl)

FINAL REPORT

Project No. 9-0329
Grant No. OEG-0-9-420329-3751(725)

IMPROVING VOCATIONAL EDUCATION IN POST-HIGH SCHOOL INSTITUTIONS

Earl W. MacArthur
State University Agricultural & Technical College
Delhi, N. Y. 13753

February 1970

U. S. Department of
Health, Education, and Welfare

Office of Education
Bureau of Research

VT010883

ED038541

Final Report
Project No. 9-0329

Grant No. OEG-0-9-420329-3751 (725)

IMPROVING VOCATIONAL EDUCATION IN POST-HIGH SCHOOL INSTITUTIONS

Earl W. MacArthur

State University
Agricultural and Technical College
Delhi, New York

February 1970

The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U. S. Department of
Health, Education and Welfare

Office of Education
Bureau of Research

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

TABLE OF CONTENTS

	Page
Preface	1
Acknowledgments	3
Summary	5
Introduction	9
Methods and Procedures	12
Evaluation	14
Appendix A	
Appendix B	

Conversations In

Post-Secondary Vocational-Technical Education

For the past 55 years the State University Agricultural College at Delhi, New York, has been engaged in providing post-secondary occupational educational opportunities. As a pioneer in education for work it seems natural that the first national conference dealing with collegiate level occupational education found its way to our campus.

Over the years the two-year college has exhibited rather schizophrenic sentiments regarding occupational education. The emerging community college has been and still is striving to achieve an image of academic respectability. An open door admissions policy, however, does little to enhance this objective. Cost sensitive citizens and trustees have little sympathy for the introduction of vocational technical education after learning the unit cost of housing and operating occupational programs. For these reasons the two-year college and/or the post-secondary area vocational center has not contributed significantly to the nation's supply of trained manpower.

Universal higher education is at the threshold of reality. The need for significant change of mission among our nation's community colleges is clearly apparent. Some leading states are already providing seventy per cent of high school graduates with an opportunity for continuing education. Few states, however, can satisfy the need for technical preparation and none have more than scratched the surface in providing collegiate vocational education opportunities to its high school graduates.

It is anticipated that many if not most states will look to their two-year colleges to satisfy the need for universal higher education and the need for occupational education. To ascertain to what degree and in what manner post-secondary vocational-technical education is being carried on in exemplary states, the State College at Delhi, with the help of HEW, brought together educational leaders from every state in the Union. It is our hope that this conference will mark the beginning of a profound and significant movement toward institutional relevance with society's needs for educational opportunity.

W. R. Kunsela, President
Agricultural and Technical College
Delhi, New York

ACKNOWLEDGMENTS

The writer gratefully acknowledges the assistance of the many persons who aided in the development, organization and conduct of this institute, especially Dr. William R. Kunsela, President of the Agricultural and Technical College at Delhi; State University of New York Vice Chancellor for Two Year Colleges, Sebastian V. Martorana; Assistant Commissioner for Vocational Education, New York State Education Department, Robert Seckendorf; and Wilbur Farnsworth, Chairman, Agricultural Division, Delhi College; Richard McCormack, Chairman, Business Management Division, Delhi College; George Duncan, Chairman, Construction Technology Division, Delhi College; Richard Seguare, Chairman, Hotel, Restaurant and Institutional Management Division, Delhi College; Seldon Kruger, Chairman, General Studies Division, Delhi College; Daniel Moskwa, Chairman, Vocational Education Division, Delhi College; and Robert Kopecek, Associate Dean of Faculty, Delhi College.

Also, Peter Clifford, Director of Research and Planning, Delhi College; Clarke Hoffman, Dean of Students, Delhi College; B. Klare Sommers, Dean of Faculty, Delhi College.

A special thanks is due those "behind the scenes" individuals who make a conference go, Emmett Hodgkins, Director of Housing, Mrs. Alfred Arnold, Miss Alma Dreyfus, Mrs. Herman Brant and Mrs. William Johnson, office secretaries.

And last, my wife, Joyce, who was sympathetic, understanding and organized, directed and operated the program for the wives of the participants.

Errata **Errata**

ACKNOWLEDGMENT

Special thanks are due Mr. Charles Albert, Assistant Project Director who devoted much time and energy in the operation of the Institute.

SUMMARY

The Institute was held on the campus of the State University Agricultural and Technical College, Delhi, New York, June 22 - 27, 1969.

Participants were invited through the State offices of vocational education from the forty-eight continental states. Thirty-one states sent fifty-nine representatives. In addition, eleven consultants representing five states were in attendance. Fifteen members of the professional staff of Delhi College participated in the program, acting as program chairmen and study group recorders.

The Institute was conducted with a combination of formal institutional presentation and structured, pre-assigned study groups. Each study group, under the direction of a consultant, developed ways and means for implementing specific Institute objectives directed to the theme of the conference, "Improving Vocational Education in Post-High School Institutions."

Institutional presentations were given by chief administrative officers. The institutions were selected as representative of four regional areas of the United States. The Eastern region was represented by the State University Agricultural and Technical College, Vocational Division, Alfred, New York. The presentation was made by Donald Jones, Director. The Middle West region was represented by Washtenaw Community College, Ann Arbor, Michigan. The presenter was Dr. David Ponitz, President. The South was represented by Rockingham Community College, Wentworth, North Carolina. Dr. Gerald James, President, was the presenter. The West was represented by Los Angeles Trade and Technical College, Los Angeles, California, presented by F. Parker Wilbur, President.

Each institutional presenter prepared a paper and reported to the participants the organization and administrative operation of his institution; philosophical considerations; and provisions for admission, counseling and housing of students. Much emphasis was placed on occupational programs, job placement and provisions for part-time employed students; disadvantaged persons; working mothers; and emerging occupational programs which will be influenced by changing work patterns and societal structures.

The afternoon sessions were devoted to a study of the fifteen Institute objectives identified in the grant application. In order to assure equal representation both numerically and geographically, participants were assigned study groups. Some criticism by the participants indicated dissatisfaction

with the system since they could not choose a study group. However, the system was followed since it was necessary to cover much ground in a short period and to maintain a degree of consistency in the daily discussions.

Reports of the study groups indicate many concerns, not the least of which is the geographical differences encountered in the organization, administration and financing of post-high school vocational programs. Semantic problems were encountered in the early planning and on the first day the project director established one ground rule, "vocational education will be defined as all programs conducted at the post-high school level, with less than a baccalaureate curriculum, which prepares an individual to enter the world of work." Such a definition was necessary to facilitate discussion and eliminate the dichotomy relative to technical-vocational education and occupational-vocational education.

Another discrepancy in definitions arose in the study group deliberations relative to post-high school vocational education. The reader will note that all presentations were made by representatives of collegiate institutions and the study group consultants were representatives of two-year colleges with one exception. A participant therefore raised the question and indicated that there were publicly supported post-high school vocational institutions other than two-year colleges. The criticism is valid and inclusion of such institutions was overlooked in the original plan.

A major criticism of the Institute was indicated in the report of two regional evaluators, Dean Schuster of Mattatuck Community College, and Dean Paul of Grossmont Junior College, whose criticisms centered on the apparent dearth of vocational educators in the ranks of minority groups, especially Blacks, Mexican Americans and Puerto Ricans. The criticism is well founded since only one Black person was in attendance. The selection of participants was left to the several states and the only decision made upon the receipt of applications was acceptance based on pre-arranged state quotas. It is well to note that not all states were represented and several declined to send participants.

The accomplishments of the Institute cannot be empirically measured since the Institute was conducted as a narrative and the study group reports based on experience, opinion and consensus. The study group reports do indicate strategies and tactics applicable to a procedure for accomplishing improvement in post-high school vocational education. The primary accomplishment of the Institute was the development of communication between and among the participants. The informal exchange of ideas, programs and

instructional content was the major achievement of the Institute. Second in importance was the realization of the need for a more detailed exchange and the future opportunity for exchange to occur in a like setting and location.

The reader is invited to study the transcript of proceedings and the study group reports for useful ideas, procedures and patterns for developing post-high school vocational education.

INTRODUCTION

The Institute was held at the State University Agricultural and Technical College, Delhi, New York, June 22 - 27, 1969. Fifty-nine participants from thirty-one states attended. Eleven consultants and the administrative staff of the College participated.

The need for the Institute was identified in the publication, Guidelines and Priorities for Short-term Training Programs for Professional Personnel Development in Vocational and Technical Education, published by the United States Department of Health, Education, and Welfare, December 1968.

The Agricultural and Technical College at Delhi, having recently established a post-high school, collegiate, vocational education program, paralleling its fifty-year old technical program, recognized from this experience many attendant problems with this mix, especially in New York State. Also, many semantic problems were evident in preliminary investigations which indicated that vocational education meant many things to many people. Not a new problem by any means. The growth and change in post-secondary education nationally in the decade of the '60s indicated a need for a situational institute where a forum of ideas and an exchange of programs and procedures could be shared by representatives of the several states.

Sixteen major objectives of the Institute were identified and the organization of the program centered on these.

The objectives of the Institute were:

- to interpret the implications of the Vocational Education amendments of 1968 as an aid in the establishment of new vocational education programs at the post-high school level;

- learn to make manpower projections and develop techniques for making immediate and long range occupational surveys for use in program planning;

- develop techniques for determining whether there is sufficient potential student population to support new vocational education programs;

- identify and review existing exemplary vocational education programs in post-high school institutions;

- identify criteria for determining when new vocational education programs are complimentary to existing programs and should be made part of the curriculum;

- to explore procedures for planning a balanced vocational education program (vertical, horizontal articulation) for the entire student body;

- determine ways of using local advisory committees and other groups, such as employers, to strengthen program offerings and accomplishments;

- examine staff requirements when new programs are added to a curriculum or old programs are modified;

- determine the type and degree of pre-service and in-service training programs for vocational education instructors with particular emphasis on programs for instructors recruited directly from skilled trades and occupations;

- explore the potential of cooperative work-study programs for improving the quality of instruction and minimizing the facility requirements of post-high school institutions;

- determine instructional methodology and the adaptation of new and innovative techniques to vocational education;

- examine the union-apprentice relationship to post-high school programs and to identify strategies for cooperation;

- examine facility requirements (e.g. instructional facilities, library) for initiating new programs;

- examine the utilization of multi-media presentations in vocational education and the adaptation of mechanical and electronic equipment to vocational education instruction;

- identify strategies for accommodating students requiring lodging facilities; and

- to determine the particular and specific needs of counseling for vocational education students.

The general plan of the Institute organized the participants into seven structured study groups with a study leader experienced in the area of the specific objectives of the group. Each group was assigned at least two objectives.

Each morning session was devoted to a presentation by a director or president of a post-high school vocational

institution. The selected institutions, representing regional areas were:

Los Angeles Trade and Technical College
Los Angeles, California
President Parker Wilber, presenter

Washtenaw Community College
Ann Arbor, Michigan
President David Ponitz, presenter

Rockingham Community College
Wentworth, North Carolina
President Gerald James, presenter

State University Agricultural and Technical College, Alfred, New York
Vocational Division
Director Donald Jones, presenter

Each presenter was asked to present a paper discussing the following topics:

a. Administrative structure
b. The curriculum and its development
c. Student recruitment, selection, characteristics and follow-up
    1. Job placement success
d. Student personnel services
    1. Counseling, housing, recreation
e. Facility design and development
f. Financing

Following each presentation, the campus presenter answered questions posed by the participants. (See appendix A for the text of each presentation and the question and answer discussion.) Each presenter also served as a consultant to any study group requesting his services. Recommendations of each of the seven study groups appear in appendix A.

Primary of the accomplishments of the Institute was the exchange of ideas in informal sessions. The structured study groups provided a carry-over to more informal discussions, often sparked by statements or procedures brought out in the study sessions. From the first day, discounting regional and state peculiarities, a language barrier existed. The semantic inferences of several phrases, words and even definitions disrupted communications until some commonality was reached. In order to achieve commonality, the project director established certain ground rule definitions for words such as vocational, technical, post-high school, secondary, college, institute. Not to be construed as an accomplishment

of the institute, at least the definitions reduced semantic, regional and state differences to a point where discussions could begin.

METHODS AND PROCEDURES

Participants in the Institute were selected by State Director of Vocational Education in the state which they represented, from a list of job titles recommended by the host institution. Based upon population, each of the forty-eight continental states was assigned a quota of participants who would be supported by the Institute. Letters were mailed to each state director indicating the state's quota and asking the director to nominate attendees from his state.

Criteria for selection was left to the director with the suggestion that nominees be selected from the following recommended list of participants:

- State and local administrators of post-secondary technical programs, teacher educators, post-secondary guidance personnel, representatives of industry, directors of area vocational schools, State directors and supervisors of vocational education, and city superintendents of schools.

The Institute was conducted as a series of formal presentations each morning followed by structured committee work each afternoon. Each study committee was led by a consultant experienced in the area of assigned committee objectives (See appendix B).

Each formal presentation by the institutional presenter was a narrative report on the development of the post-secondary institution covering five major topics recommended to the presenter. The institutions were selected to be representative of four regional areas of the United States and also representative of varying stages of development and philosophy. Each presenter covered in detail the five areas indicated in the introduction.(See appendix A for the complete text of each presentation.)

Each study group reported its recommendations for the improvement of post-high school vocational education according to the Institute objectives assigned to the group. Accounting for regional, state and philosophical differences, each study group's report is thus written to reflect these differences, but also to be used as guidelines for the establishment of new institutions and the improvement of existing programs. (See appendix A for the complete text of each report.)

Evaluation of the Institute was accomplished by asking four attendees at the beginning of the program to submit a written evaluation to the project director. The evaluators were selected by the project director as representative of the four regional areas of the country: North, East, West and South. In addition, each participant was given a structured questionnaire on Thursday of the Institute week which was designed to elicit responses concerning the organization of the Institute. The questionnaire contained a combination of open-ended and forced choice questions covering both organization and content.

SUMMARY

The major accomplishment of an institute of this kind centers on thc interaction of the participants in both formal and informal groups. Empirical evidence gained through objective measurement is not a strong point of this type of organization. Subjectively, the outward expressions of interest, involvement and participant attendance indicate that a forum of ideas did exist and that a major objective of the Institute was accomplished.

The exchange of ideas and discussion did indicate a major shortcoming of the Institute, that is, the dearth of representation of minority group vocational educators, especially Black, Mexican-American and Puerto Rican representatives.

The selection of participants was left to the several states and whether by design or omission only one Black educator was in attendance and several states declined to send representatives. As indicated by Dr. Schuster, a regional evaluator, this is indeed a sad commentary on the state of affairs in vocational education.

The project director would recommend that future institutes be planned with full cognizance that there are many qualified and competent minority group educators and that their attendance should be assured.

A major accomplishment was holding the conference on the campus of a rural two-year technical college. The attendant problems and logistics involved in moving the participants from the several states to this isolated, mountainous area, where post-high school vocational education is taking place, in retrospect, was a major accomplishment. Much credit is due the participants for enduring many of the inconveniences encountered.

The significant results of the Institute are more readily presented in the formal reports of the presentations and study group reports. Any long range results of the Institute will be evidenced by the implementation of the recommendations by participants in single institutions or in state planning for post-high school vocational education.

EVALUATION

As outlined above, all Institute participants were asked to complete an evaluation questionnaire. Additionally, the following individuals were asked to provide a detailed written evaluation. These four individuals were selected by the project director during the conference and represent as nearly as possible the geographical divisions of the country.

East	Dr. Louis Schuster Dean of Faculty Mattatuck Community College Waterbury, Connecticut
Mid-West	William Gooch Dean of Technology College of Dupage Glen Ellyn, Illinois
South	Don Yarbrough Counselor Technical-Vocational Division South Plains College Levelland, Texas
West	C. Allen Paul Dean of Technical-Vocational Education Grossmont Junior College El Cajon, California

These evaluations follow.

A Regional Evaluation of
The National Institute
for
"Improving Vocational Education
in Post-Secondary Institutions"

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

by

Louis H. Schuster, Ph. D., Dean of Faculty
Mattatuck Community College
Waterbury, Connecticut

Overall Evaluation

Looking at the Conference in its entirely, it can be said that it was satisfactory and efficiently conducted, although the general appraisal would have to be that it was unexciting and left much to be desired from the standpoint of innovation. In these exciting times filled with burning issues, the Conference did not address itself seriously or candidly to the problems of vocational education of 1969 or the 1970's. Moreover, the individual group sessions followed a traditional pattern instead of the dynamics of sensitivity, interpersonal activity.

STRENGTHS OF THE CONFERENCE

(1) The facilities of the Conference site, Delhi Technical College in beautiful Delhi, New York, were excellent. Furthermore, the hospitality was good and an air of good feeling pervaded among the 69-70 delegates.

(2) The Conference was not overly structured which permitted considerable personal freedom during non-conference hours.

(3) The food was ample and delicious -- perhaps too much so for the middle aged conference participants.

WEAKNESSES OF THE CONFERENCE

(1) There was a broad representation of participants from all sections of the United States, however, of the 69-70 participants only one was non-white. It is amazing that the U.S. Office of Education, using federal tax dollars, consented to underwrite a conference in which only one black per-

son participated. This raises two questions: (a) Are there no black professionals in vocational education in the United States worthy of participating in a conference of this nature? (b) If there are eligible black professionals qualified for such a conference, were they purposely screened out of this national conference?

(2) One of the most important current issues of the day related to the problem of technical education of innercity populations, yet none of the conference sessions were devoted to the topic. One was left with the feeling that of the millions of tax dollars allocated for education in the United States, little thought is given by state administrators of vocational education to its utilization to help solve chronic unemployment and underemployment in the central cities of America. Indeed, it was shocking to hear one of the consultants,the President of a large urban college, state and reemphasize that it was useless to offer technical education to black students, that black students do not want trade or technical training. (I could not allow this statement to go unchallenged and I vigorously attacked it as being unsound, untrue and racist). Only one of the consultants (Dr. David Ponitz from Ann Arbor, Michigan) dealt at any length with the problem of vocational training for the underprivileged.

(3) Most of the general conference topics were concerned merely with descriptions of vocational curriculums at the several institutions but revealed little innovation of curricular patterns or teaching techniques.

(4) The Conference afforded an opportunity for individual group discussions, and although I was unable to participate in sessions other than my own, the consensus was that they were uninspiring.

A Regional Evaluation of
The National Institute
for
"Improving Vocational Education
in Post-Secondary Institutions"

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

by

William Gooch, Dean of Technology
College of DuPage
Glen Ellyn, Illinois

My personal thanks for a wonderful week; I hope this report will meet your requirements.

Advance information forwarded to participants indicated that this conference had been well planned and organized. Arrangements, conference conditions, and programs were mailed well in advance. Inviting the wives to accompany the delegates was a nice touch and very much appreciated by those accepting.

Institutional presentations were well done by consultants who represented different regions and types of schools. Each consultant, in his own way, allowed us to view his school's successes and failures in a refreshing manner. Too often, well known professional speakers deliver slick presentations that many people have heard before. Topics for the afternoon study sessions were so well chosen that many participants were sorry that they could be a part of only one group. These sessions, which were quite lively, allowed a give and take type of dialogue that had a way of drawing out the participants. The presence of a recorder from the Delhi faculty, along with a secretary, was another example of advance planning.

The conference made it clear that most two year post-secondary institutions are searching for answers to urgent problems. This institute lured us away from our desks and afforded an opportunity to discuss mutual problems and search for solutions. The people I talked with thought the nation-wide approach to selection of participants gave the conference a desirable flavor that led to many interesting discussions.

The Illinois Board of Vocational Education has requested that the three state participants make themselves available

as speakers. Therefore, a summary of study sessions, presentations, and recommendations would be most helpful.

All things considered, this was a well planned, worthwhile conference and I would be hard pressed to offer a criticism. Informal evening buzz suggested by some, but the cocktail parties handled this very well.

A Regional Evaluation of
The National Institute
for
"Improving Vocational Education
in Post-Secondary Institutions"

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

by

Don Yarbrough, Counselor
Technical-Vocation Division
South Plains College
Levelland, Texas

I. Organization

It was one of the best organized institutes ever attended by this reporter. The same daily format of speakers in the morning, break and question and answer, with study groups in the afternoon lended systematic continuity to the schedule; yet it was not monotonous as the daily schedule was interspersed with the two banquets and ample recreational opportunity.

Housing facilities were adequate and comfortable and the food was excellent. Allowing and encouraging wives to come and charging such a nominal cost for them was very considerate of the hosting institution. The program for the wives was extremely well planned and received.

II. Content

The content of the institute was favorable. The morning presentations by college presidents and directors were excellent. Those making presentations were varied enough geographically that they gave a good insight into what is taking place over the country.

Study groups in the afternoon were diverse and dealt with questions important to those in vocational education. A sharing in written form from the various groups is essential for total benefit.

III. Effectiveness of Presentation

The morning speakers and moderators did an excellent job. All speakers were good and made significant points in their own way. It would have been helpful in the question and

answer period if those asking questions had been required to write down the question before asking it as those asking questions tended to ramble.

Presentation in study group C was done exceptionally well by the leader. The recorder kept good records of the proceedings and all the group were complimentary of the way the group was run. Since personal participation was limited to Group C proceedings, one cannot speak for the other groups.

Concerning the two banquets, one was good, the other was poor. The banquet on Monday, June 23, dealing with "Implications of the 1968 Vocational Education Amendment for Post-High Institutions" was very disappointing both to general expectation and to specific items. The other banquet was relaxing, enlightening, and no harsh words are found for it.

IV. Participant Involvement

Participant involvement was good in attendance of all meetings. Questions were readily asked during the morning sessions; however, not all questions were of value to the total group.

The small size of the study groups and the arrangement of the banquet tables for small groups significantly induced involvement of the participants.

Enough free time was allowed for persons to visit with anyone from any part of the country about specific ideas and concerns. This was found to be especially enlightening and helpful.

V. Significance of This Type of Institute

This participant found the institute most significant in that it provided one an opportunity to be with persons throughout the nation with a common interest in both formal and informal settings. Such an opportunity is valuable in terms of new and shared ideas.

VI. Participant Selection

The concept of having representatives from various states is excellent. One suggestion is to have at least one of the state participants to be new to the field of vocational education. This would allow the novice vocational educator to learn from the experienced; whereas, some of the more experienced vocational educators probably find the topics and presentations somewhat "old hat". To the newly interested vocational educator everything is new and exciting and helps to broaden the knowledge of those in the field thereby improving vocational education. By novice it is meant a person with under three years experience in vocational education. In addition it might be helpful to have instructors and counselors as well as local,

state, and national administrators participate.

One very noticeable lacking was the absence of minority group delegates. More representation from the Black and Mexican-American cultures would have added scope to the institute.

VII. Utilization of Institute Findings

The findings should be utilized in at least two ways: 1) the individual participant will use in his particular setting and situation the information he has gained through the formal and informal meetings, and 2) the material should be made available to participants in printed form so that they can make use of it throughout their geographic area through reprints.

It might also be helpful if participants were requested to make some reports to local, area, and state groups about what appeared to be significant to them.

A Regional Evaluation of
The National Institute
for
"Improving Vocational Education
in Post-Secondary Institutions"

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

by

C. Allen Paul, Dean
Technical-Vocational Education
Grossmont Junior College
El Cajon, California

My compliments to Delhi Tech's administration and staff and in particular Mr. Earl Mac Arthur for an excellent job of organizing the June conference on Improving Vocational Education in Post-High School Institutions. At several points in the conference I perceived some frustration on the part of the organizers, which in my opinion, was nothing more than should be expected in any conference. The conference ran smoothly and all persons attending were accorded much attention and concern by the institution. This was especially true in the housing, eating, and entertainment arrangements. The organization of the conference itself was adequate. Now that the conference experience is behind us it is easy to say I would have done things differently.

The main speakers or consultants were representative of a variety of institutions involved with post-high school vocational education. It was my feeling, as with others, that the presentations were too lengthy, that there were insufficient breaks, and too limited an opportunity for dialogue and interaction. Smaller splinter groups might have effectively evaluated the content of the consultants' presentation in fifteen or twenty minutes and selected a reporter to offer that group's critique or criticism of the material presented. This technique may have produced more effective dialogue about the information presented and perhaps may have brought to the surface more of the untouched gut level wealth of material from the experience represented by the consultants. And it was my feeling that too little relevance existed between the material given by the consultants and the afternoon workshops.

I did have an opportunity to discuss the effectiveness of our study group sessions with a number of the participants from various groups and feel that the participation ranged from one extreme to the other, with some persons being active, and others passive. This may be due to particular individuals selected to participate, and their level of commitment to the

conference. I feel that my group was particularly effective in meeting the objectives of our assignments. There was sufficient interest of some participants in our group that they devoted time in the evening deliberating the various possibilities and putting their ideas into an organized document as a guide for group discussion and brainstorming. The effort of the study group participants was productive and useful. In the future I would suggest not confining the groups to a specific time but rather giving the group a charge and a responsibility and allow it to have free run with ample work in the assignment. Assignments were predetermined and perhaps could have been more productive if persons with special talents and interests were given the opportunity to select a study group, with topics closest to their own area of concern. Further, I feel a two or three minute daily report by each group would have triggered dialogue bringing new dimensions to the total consideration by the experts in attendance. The participants' selection, I felt, to be very good with few exceptions. More minority and disadvantaged representation would have added to the conference in terms of the conference theme. It was educational to work with a group of professionals from other parts of the country and particularly interesting to note how many problems are common to all institutions involved in post-secondary vocational education.

I felt the selection of consultants was good, but that the consultants could have more effectively contributed by being available to the various study groups as resource persons on call during the week. A most important facet of this conference was the bringing together of professionals from throughout the nation to meet in a setting where dialogue was easy and common problems could be discussed, with ample time day and night to try new ideas against the experience of experts. My personal vocational educational concepts have gained considerable breadth and depth as a result of my participation in this conference. Many with whom I had the pleasure to meet and discuss seemingly all parameters of post-high school vocational education improvement felt as I did about the value of the conference. I feel the data resulting should be made available to persons who need consultation on the topics covered in this conference. Perhaps a one page flier advertising the fact that the proceedings are available should be mailed to districts having post-high school vocational education programs throughout the country. The value of this conference to vocational education on the national scene was worthy of the expenditure and effort on the part of all concerned.

To secure maximum benefit from this conference experience, willing participants from the Delhi conference should be involved in another conference held in a matter of a few months to encompass more of the major problems confronting post secondary vocational education today. Though the value of the work done at the Delhi conference is significant and the conference was well justified by the outcome, if it were considered as a warmup for a more rigorous work conference in the near future, I feel certain that tremendous benefits would accrue to vocational education in this country.

Each participant completed a questionnaire on Thursday of the Institute week. (The form was distributed prior to closing to eliminate conflict with travel schedules on Friday.) A composite of the results follows with a copy of the questionnaire.

PROJECT DIRECTOR'S EVALUATION

A critical evaluation of an institute organized in the prescribed manner is difficult from two perspectives. One, the actual institute week is anti-climatic after the preparation involved and two, the project director, because of the demand on his time for overall operation of the institute week is unable to be intimately involved in the deliberations of the participants. As a result the director is inclined to evaluate the proceedings from an operational rather than a program content point of view. Thus the writer will attempt to identify the attendant problems of organization which had to be solved by the director and his staff.

The first, and at the time the most serious, was the delay in communication from the U. S. Office of Education. Application deadlines for submission were forty-five days following receipt of the original announcement by the U. S. Office of Education. Notification of grant awards was to have occurred thirty days later, but due to delays and the fact that two institutes were to be funded, and only one application for a rural institute was received, notification was delayed an additional fifteen days. When notification of the award was received, the Office of Education requested a national conference rather than an Eastern United States institute as was originally contained in the application. Since the original application had specified the dates of the institute, the lead time for organization was reduced to seventy-five days. At the time this looked to be an insurmountable problem.

Secondly, the problem of communicating with all the State directors of vocational education had to be achieved. Two mailings and several telephone calls accomplished this task. The major problem, in the time allowed, was in the failure of State directors to communicate with possible participants within the state. This may account for the lack of representation from several states. An improvement in notifying possible participants would have been direct mailing to all post-high school institutions and then selecting applicants on the basis of applications received. This method would be utilized in the conduct of a future similar situation.

Once applications were received, travel arrangements had to be made. Because of Delni College's location all

participants were advised to arrange flight plans to arrive at John F. Kennedy International Airport between 12:00 Noon and 5:00 p.m. June 22. Chartered buses then brought the participants to Delhi.

Since the only feasible access to Delhi is by motor vehicle, participants from nearby states were advised to drive.

The arrival of the participants was accomplished but not without many moments of anxiety, both on the part of the director and the participants.

The Institute proceeded according to plan and no major problems were encountered which led to major changes in its format. The writer, in retrospect, feels changes in the organization would have improved the Institute.

For the time involved, the number of discussion objectives could have been reduced. In order to cover the topics and provide for institutional presentations, little time was allowed for interim reports or the attendance by the participants at more than one study group. This opportunity should have been provided.

A reader of the study group reports will find that much thought and effort went into the compilation and should be valuable guidelines for post-high school vocational educators.

State University
Agricultural and Technical College
Delhi, New York

A National Institute
"IMPROVING VOCATIONAL EDUCATION IN
POST-HIGH SCHOOL INSTITUTIONS"

EVALUATION FORM

1. What is your opinion of the institute format and structure?

   ___ Excellent
   ___ Good
   ___ Satisfactory
   ___ Unsatisfactory

   a. Do you have specific suggestions which would have improved the institute?

   _____

   _____

2. Was the program content helpful? ___ Yes
   ___ No

   a. In what way was it helpful or not helpful?

   _____

   _____

3. Were the study groups of value? ___ Yes
   ___ No

4. What group were you assigned to _____(ABCDEFG)
   a. Did you object to being assigned to a group?_____Yes _____No
   b. If yes, what group did you prefer____(ABCDEFG)
   c. Please indicate your reasons for a group preference.

   _____

   _____

5. Were the morning sessions valuable?
   _____of much help
   _____helpful
   _____not helpful
   _____undecided

6. If the morning sessions were helpful what particular aspect was most helpful?

   _____

   _____

7. Were the exhibits of value? ____Yes ____No
   a. In what way?

_____

_____

8. Are banquet type formal addresses of value?
   _____Definitely helpful
   _____Somewhat helpful
   _____Of no help at all
   _____Undecided

9. In your opinion, was the institute time schedule?
   _____Too crowded
   _____Somewhat crowded
   _____Just right
   _____Too structured
   _____No opinion

10. If you were to plan the institute what portion would you delete?

_____

_____

11. Given the topic and guidelines, what portion of the program would you expand?

_____

_____

_____

12. Please add any additional comments which would aid in the overall evaluation of the institute.

_____

_____

_____

_____

State University
Agricultural and Technical College
Delhi, New York

TABULATION OF OPINION QUESTIONNAIRE

(National Institute)

1. What is your opinion of the institute format and structure?

Excellent	- 18
Good	- 25
Satisfactory	- 8
Unsatisfactory	- 1

a. Do you have specific suggestions which would have improved the institute?

No comments	- 12
Comments	- 5

Comments:

Choice of group topic - previous assignment - 5
Attend two discussion groups
Include consultants of varied backgrounds
More participant involvement
1½ hours too long - 2
More time on study groups
More crossbreeding involving students, business and industry
Greater variety of attitudes and speech topics
More work on curriculum
Change personnel in discussion groups for each session
Early speaker talked too much
Small group discussions with consultants
Instructions on mailing exchange materials
Eliminate Q and A period
Evening buzz session
Student participation
More specific study sessions
Not as much down time
Have discussion leaders primed
Several 15-20 minute presentations first two days

2. Was the program content helpful?

48	- Yes
2	- No
1	- Somewhat

a. In what way was it helpful or not helpful:

Problem identification & backdrop of diversity - 1
New concepts - forthright presentation - 3
None - 11

Told like it was by experts
Ideas & approaches to solutions of problems - 7
Source of information on Vo-Tech - 4
Morning programs - interesting
Atmosphere for constructive thinking
Interesting
Too general
Too limited to specific situations
Representative program for regions of country - 2
Communication with other sections of country
Philosophical presentation - 4
Ideas of handling disadvantaged
Ideas for P.R., counseling & student services
Aid to planning - 2
Broadness
Things being done and to be tried - 2
Widened perspective - 2

3. Were the study groups of value?

40 - Yes
3 - Limited
2 - No
3 - Undecided
3 - N.A.

4. What group were you assigned to:

A	- 1	E	- 5
B	- 3	F	- 4
C	- 4	G	- 1
D	- 2	N.A.	- 1

a. Did you object to being assigned to a group?

10 - Yes
39 - No
2 - N.A.

b. What group did you prefer?

A	- 4	E	- 1
B	- 4	F	- 1
C		G	- 3
D		N.A.	-27

c. Please indicate your reasons for a group preference:
Scope of job assignment - 4
Area of special need - 4
Liked to have had choice, but not displeased
Assignment coincided with area of response - 2
Danger of pooling ignorance
Rotation of groups - 3
Advanced knowledge - 2
Had more to offer in another group - 2
Interest - 2
Too much time devoted to study groups

5. Were the morning sessions valuable?

28 - of much help
21 - helpful
2 - not helpful
0 - undecided

6. If the morning sessions were helpful what particular aspect was most helpful?

In-depth presentations - 13
Q and A - 9
Too much time to accomplish little - 1
New ideas - 9
Problem solving - 5
Variety of content - 4
Geographical and Philosophical difference - 4
Different points of view - 2
Wilber (good) - 1
Jones (poor) - 1 (good) - 1
Informal discussion information - 1
Telling it like it is - 1
Realization of potential of V.E. - 1

7. Were the exhibits of value? 16 - Yes
28 - No
7 - N.A.

a. In what way?
Sources of information - 2
Ideas - 3
Too limited - 7
Location - 2
Texts - 2
Waste of time - 1
From program offering - 1

8. Are banquet type formal addresses of value?

11 - Definitely helpful
30 - Somewhat helpful
7 - No help
2 - Undecided
1 - N.A.

9. In your opinion, was the time schedule:

1 - Too crowded
1 - Somewhat
39 - Just right
1 - Too structured
5 - No opinion
1 - Needed more structuring in groups
3 - Too lax
1 - More breaks in A.M.

10. If you were to plan the institute what portion would you delete?

25 - N.A.
2 - Group assignment
3 - Compress morning report
1 - Don't repeat topic

2 - Add more
2 - Bus ride
1 - Less presenters - Add panel
2 - Reduce number of study groups
1 - Need more of these (type)
2 - Evening small group meetings
1 - Exhibits
1 - Friday morning session
2 - Question and answer periods
2 - Rain
1 - More representation - P.M. sessions
1 - Lengthen question and answer periods
1 - Study groups
1 - Shorten study groups
1 - Shorten time span of conference
3 - Banquet address
1 - Repeating or summarizing questions

11. Given the topic and guidelines, what portion of the program would you expand?

11 - Cluster programming
13 - N.A.
2 - More representatives and schools
6 - Mre small group discussion
3 - Coop. effort secondary - Post-secondary
1 - More specific presentations
1 - Morning sessions
2 - Study Groups - more pertinent subjects
1 - Study Group - rotate assignment
1 - Group participation in general sessions
1 - More speech topics and greater variety
1 - More organized activities
1 - More attention to topic
1 - Higher Education representatives
1 - Panel discussion
3 - Question and Answer
1 - More on political and functional state organization
1 - Costing and Planning - PPBE
1 - Narrow the scope
1 - Shorten morning sessions
1 - Separate degree from non-degree
1 - More on disadvantages
1 - Visit other N.Y.S. facility
1 - More preparation for work groups
1 - Innovation and Inst. approach
1 - Consultation
1 - Voc-Ed in other than Community Colleges

12. Please add any additional comments which would aid in the overall evaluation of the institute:

8 - Thanks
7 - Good planning and detail
5 - Advance topics to be covered
1 - Worthwhile activity to be assoc. with Voc-Ed. objective

2 - Remote location
7 - N.A.
1 - Small group interaction
1 - More representation from H.E.W.
2 - Morning session & Study Group related
1 - Involve outsiders
2 - Critical of facilities
1 - Better than average participation
1 - Excellent group leader & recorder - Group C
1 - Negro-Mexican American representation
1 - More variety of topics
1 - Catalog & brochures for distribution
1 - Visit to operational campus programs
1 - Group leaders should not teach
3 - Participate in more than one group
1 - Should have had more H.S. representation
1 - Send copies of published report
1 - Shorten conference to two or three days
1 - Hold hearing with outstanding schools

APPENDIX A

Contents	Page
Dr. Gerald James	1
Mr. Donald Jones	27
Dr. David Ponitz	51
Mr. F. Parker Wilber	81
Study Group:	
A	121
B	131
C	137
D	145
E	157
F	163
G	177
Conference Wrap-Up Dr. Kenneth T. Doran	185

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

A Presentation by Gerald B. James, President, Rockingham Community College, Wentworth, North Carolina.

State and Institutional Administrative Structure

Citizens of North Carolina for many years have felt that we have a good system of education: a good system of elementary school, a good system of secondary schools, and a good system of colleges and universities. Soon after World War II, however, we began to realize that there was a gap in our educational system. We had many citizens who wanted more education than they received from the first grade up through the high school level, and more specialized education than they received up through the high school diploma level; yet, citizens who did not aspire to the baccalaureate degree. What could and what should be done for these citizens?

In 1957, steps were taken to fill the educational gap -- plans for the development of a state-wide system of Industrial Education Centers which would provide up to two year of educational opportunities beyond the high school level and educational opportunities for some citizens who dropped out of high school before graduation.

Traditionally, North Carolina has been an agricultural and textile state. It is now in transition to a state characterized by a better balance between agriculture and diversified industry. Had agriculture suddenly mechanized without industrial development occurring simultaneously, many displaced farm families would have been out of employment. Similarly, had industry developed suddenly, pulling much labor away from agriculture, difficulty would have existed with agriculture. Fortunately, agriculture mechanized, displacing labor at about the same rate as developing developing industry required labor.

The development of the Industrial Education Centers in North Carolina was a creation of society to help develop citizens capable of taking their place in the changing society. It is interesting that American society has usually been sufficiently creative to innovate and institutionalize systems needed by society to promote the common welfare.

By 1960, seven Industrial Education Centers were in operation, and plans were well laid to develop a state-wide system of twenty-five such institutions. But by 1960, five relatively new public junior colleges were also in operation and plans were evolving to develop a state-wide system of public junior colleges. The question arose -- we are not a wealthy state and can ill afford two new systems of education, so what shall we do? While both of these systems are in their infancy and before either has time to become steeped in its own biases and prejudices, should we not consider merging the two? Such a plan would appear to be sound economically in that fewer institutions would be required in order to place educational opportunities within reach of the citizens of the state. Too, each plan would eliminate considerable overlapping since each type of institution would teach English, mathematics, physics, and chemistry; each would have a Library; and each would require facilities. It would be more economical to equip and operate twenty-five comprehensive (combined) institutions than twenty-five public Junior Colleges and twenty-five Industrial Education Centers. It would be sound educationally. Students enrolled chiefly for the vocational and technical subjects could, on the same campus, get some general education courses which would have a liberalizing effect. Similarly, those enrolled chiefly for general education work could elect some vocational and technical subjects which would have an equally liberalizing effect. We have to look no further back in history than Nazi Germany of the 1930's to see a generation of Germans who were products of highly specialized schools, perhaps the most highly skilled craftsmen and the best trained technicians the world knew at that time; but citizens short in general education, and you see the difficulty that generation of Germans caused the entire world. We did not want human machines, we wanted good citizens as well. Merging the two institutions would allow for more breadth in curriculum offerings. Merging the two systems would appear to be sound economically and educationally.

The Governor (Governor Sanford) appointed a Commission on Education Beyond the High school to study education beyond the high school level and recommend direction. The Governor's Commission studied the problems related to effective education for the citizens of the state and the problems of cost. They recommended to the Governor, and he to the Legislature, that the two new systems be merged. The 1963 Legislature passed what we know now as the Community College Act, enabling legislation for the development of a state-wide system of comprehensive Community Colleges. Thus, there was born a new system of institutions in North Carolina. The Community College Act was written in such a manner as to allow existing Industrial Education Centers and public junior colleges to grow into comprehensive Community Colleges.

The new pattern of publicly supported education in North Carolina, then, was comprised of three types of institutions: (1) Elementary and Secondary Schools (2) Community Colleges, Technical Institutes, and Industrial Education Centers, and

(3) Four-year Colleges and Universities. An Industrial Education Center would be an institution offering (1) one-year vocational programs and short courses, and (2) adult and community services programs. An institution offering the same two types of programs plus two year occupationally oriented programs would be known as a Technical Institute. A Community College would offer: (1) General Adult and Community Services Programs (2) One-year occupationally oriented programs (vocational programs) (3) Two-year occupationally oriented programs (technical programs) and, (4) College Transfer programs (two years of liberal arts and sciences transferable to four-year colleges and universities). During this relatively short period of time all existing institutions and all new institutions became Community Colleges or Technical Institutes -- no Industrial Education Centers remain.

Each institution operates under a Board of Trustees comprised of twelve citizens of the county or counties contiguous thereto. Four of the Trustees are appointed by the Board or Boards of Education in the county, four by the County Commissioners, and four by the Governor. After the initial group, each serves for eight years.

There appear to be three basic patterns for the organization of post-high school vocational and technical education programs. One is to include such education with the public school system forming a K through 14 pattern. Second would be to make such institutions separate from the public schools, but as a branch campuses of the University. The third pattern would be to regard K through 12 as one system, the four-year state supported colleges and universities another system, and the two-year post-high school institutions,whether they be technical institutes or community colleges, as a third system.

There are numerous advantages and disadvantages to each approach. In favor of the K through 14 system might be such items as central purchasing and maintenance, economy and efficiency in auxiliary services, multiple use of specialized equipment and facilities, and better articulation between secondary programs and post secondary programs. Obviously, many school superintendents prefer this approach since the superintendent is responsible for the total K through 14 system.

Kentucky follows a system of all community colleges being branch campuses of the University. They would argue that a great wealth of knowledge and wisdom from the University can be focused upon the branch campuses. Furthermore, they indicate that the prestige of the University adds to the prestige of the branch institutions, and that unification of post high school education is certainly an advantage. University personnel, as well as Trustees of the University, seem to like this approach because it provides the University with general supervision over the branch campuses which provide excellent feeder programs to the University.

The third major approach would be to regard such institutions as a separate system. This is the pattern selected by North Carolina after studying the various approaches. Advantages of this approach are that certainly the focal point of administrative concern would be on two years of post-high school education, as separate from the public schools and separate from the University. The curriculum can be tailor-made for the needs of the enrollees. It would not be a watered-down engineering program, which certainly might appear to be a possibility if it is a branch of the University. There would appear to be a greater assurance of adequate financial support because the institution would stand on its own, whereas, it if were a branch of the University, the University might get first priority on funds. Perhaps one of the most important advantages lies in the fact that if it is a separate institution, faculty and staff can be selected specifically for the institution rather than for secondary teaching as well as post-high school teaching, and rather than accepting personnel from the University campus.

The state level staff for the elementary schools and the secondary schools is the Department of Public Instruction, headed by a State Superintendent of Public Instruction who is a member of the Council of State. The state level policy making body is the State Board of Education. The state level staff for the Community Colleges, Technical Institutes, and Industrial Education Centers is the Department of Community Colleges. The state level policy making body is also the State Board of Education. The four year colleges and universities have a higher degree of local autonomy and therefore have no state level staff <u>per se</u>. The state level policy making body is the Board of Higher Education.

Perhaps it would be well to diverge from the main direction of the topic to explain the general usage of the terms vocational and technical. In North Carolina, a professional person is one who devotes the major portion of his time, energy, and effort to dealing with ideas and concepts -- theory. A skilled craftsman is one who devotes a major portion of this time, energy, and efforts to manipulative skills. A technician is one who falls somewhere between. He must be able to deal with ideas and concepts sufficiently in order to communicate effectively with the professional whom he supports, but he must also possess enough of the manipulative skills in order to be able to apply the ideas and concepts either in an industrial setting or in a laboratory setting. Vocational programs are generally one year in duration and produce craftsmen. Technical programs are generally two years in duration, and professional programs are generally four years in duration. Community Colleges and Technical Institutes offer vocational and technical programs, but do not offer professional programs.

Financing

When planning the system of Community Colleges, the first idea on financing was that the costs would be borne

one-third by the State, one-third by the County, and one-third by the student. We realized, however, that we have 100 counties and obviously would not have 100 institutions. If counties with institutions paid one-third of the cost of operation, they would desire to charge out-of-county students a higher tuition rate, thereby keeping education from being equally available. Thus, the State's share was raised and the county's share lowered, to a point that a county would be willing to pay that portion and accept all citizens of the State on an equal tuition basis. The aim was that financial support would be approximately 65% from State funds, 15% from county funds, and 20% from student tuition. In order to simplify fiscal records, functions were selected which each would support and which would amount to the approximate percentages selected; i.e., the county would pay for lights, heating, cooling, water, building and grounds maintenance, etc., which approximates 15% of the total operating costs. Equipment costs and instructional salaries are paid from State funds and the tuition funds.

What is the cost to the student? Let us assume that the cost of attending college for one year is $2,000. The cost of room and board is approximately one-half that amount, thus the cost of instruction is about $1,000 per student per year. The student's share is 20% (20% x 1000 = $200 per twelve month year - cost to the student for tuition and fees, plus his books.) Thus, $200, plus cost of books, is the cost per year to the student.

Reports are submitted to the state regarding student contact hours of instruction and student classification. The worries of matching federal funds are borne at the state level.

Facility Design and Development

Numerous publications are available which deal with site selection. Therefore, I will not get into details. We purchased 150 acres of land in a rural area where three roads join leading from the three population concentrations in our county. Our campus lies in the geographical center of the county served and between the three towns.

The Trustees knew North Carolina University, Duke University, Davidson College, and many other colleges and universities. They knew high schools, but none knew much about community colleges. We didn't want an overgrown high school nor a miniature university. We decided to visit some Community Colleges as a basis for gaining ideas. Having visited some twenty-eight community colleges in California during the preceding five years, I knew that we could see a variety of campuses there. I, personally, selected seven for us to visit. I selected those with a similar population base to ours, and those with a similar tax base to ours. This would enable us to say, "We can do that, too, if we want to" about anything we saw. The Trustees, architect, and I visited the seven selected colleges. I carried a compact tape recorder and

"talked to it" almost constantly, especially regarding things we saw which we liked or didn't like. The architect made many pictures (color slides) covering things we liked and didn't like. The trip was well worthwhile in that it helped us solidify our thinking in some areas and gave us a base from which to talk and plan.

Just prior to the trip, the architect, each Trustee, and a knowledgeable Community College Consultant were each given a loose-leaf notebook which I had developed entitled, "Plans for Facilities." We devoted two full days and one night meeting to going through the notebook. Following the discussions, I revised the notebook, which was the guide for the architect and me. It included an introductory section plus a section for each prospective building, parking, utilities, etc. For each building the rooms to be included and their sizes were listed, along with other information descriptive of the functions to be performed in that room.

Our campus lies in rolling hills. We chose to build with the contour rather than upsetting the terrain greatly. We built 900 feet back off the highway, which makes for a quiet campus setting as well as an attractive one. We are an all electric campus -- heated and cooled electrically. Thus, we have a quiet, clean campus. All utilities are underground. The first four buildings are Classroom Building, Library, Shop Building, and Laboratory Building. A Physical Education Building should be completed next month and a Student Center Building begun next month.

Careful planning should enable the campus to be compact and to appear complete at any stage of development. Having to go back and place a building between two existing buildings disrupts traffic patterns, destroys grass, destroys shrubbery, usually tracks mud into corridors of existing building, and in general is quite inconvenient.

When we were building, we were short on funds and I suggested we omit the landscaping from the contract, saving about $30,000. One Trustee spoke strongly against it, saying he expected me to take that position, but that we must make the new institution attractive initially since we do not have an established educational reputation to attract students as does North Carolina State University, Duke, and others in the State. He was right. Making it attractive initially has helped greatly.

Structurally, we avoided inner load-bearing walls. This gives a higher degree of flexibility. Inner dividing walls can be moved as functions change.

We also found it desirable to list equipment which was to be placed in each room before planning room sizes. I know of a physics laboratory built too small because the architect used a standard size. Physics laboratories today have much more equipment in them than twenty years ago. The old standard

"24' x 32' is the size of a physics laboratory" approach will not suffice.

The Curriculum and Its Development

As a basis for assembling data which would have implications for curriculum development a state-wide manpower needs study was conducted in North Carolina during the formative period of the industrial education centers. Since the state office of the Employment Security Commission had personnel who were trained to conduct such studies, the Commission was asked to conduct the study. The initial study was limited to selected manufacturing areas. Later studies covered non-manufacturing areas, including the medical-health field.

Data were divided for sub areas of the state. Thus, for a given area we knew that a given number of craftsmen of specific types would be needed during the next five years and ten years. These date obviously had implications for the programs which should be offered in specific institutions. Similarly, the study indicated specialities in which technicians would be needed. Beyond these implications, there appeared to be some programs which should be offered in almost all community colleges and technical institutes; i.e., secretarial science, automotive mechanics.

Local craft surveys, some rather simple, yielded helpful data. Such surveys, whether planned by the staff or with the aid of advisory committees, when analyzed by advisory committees proved most helpful in determining which programs would be offered.

The Curriculum Laboratory in the Vocational-Technical Division of the Department of Community Colleges has devoted its time and energy to the development of curricular materials for the vocational and technical programs. The full-time staff of curriculum specialists have worked with business and industrial personnel and trade and technical teachers from the institutions in developing course outlines, library lists, and equipment lists. This type of teamwork on a state level plus similar efforts through advisory committees on the local level have been most helpful in curriculum development. My institution has twelve active advisory committees, ranging in membership from seven to fifteen - an advisory committee for each occupational program, plus two for programs being considered for addition to the total offerings.

Curriculum development is a local responsibility, but assistance has been available from the Curriculum Laboratory. Materials developed by the Laboratory are made available throughout the State. Also, there is a good flow of materials among institutions within the State.

All new programs offered by institutions must be approved by the Department of Community Colleges and the State Board of

Education. This forces an institution to be able to justify a program before it is added. Prerequisite to State approval is a thorough local craft survey. The State Board of Education also is concerned that there not be duplication of programs among institutions unnecessarily. Some programs are expensive and cannot be offered in all institutions. Needs are limited in other areas, thus not justifying that a given program be offered in every instiution.

Student Recruitment, Selection, Characteristics, and Follow-Up

A. Student Recruitment

If there is one truism in educational circles, it is "begin with the student where he is." This same statement may be applied to student recruitment for a new community college.

Recruitment is a process of information giving and persuasion. Some principles from which to operate in attempting to recruit a student body include:

(1) Information will have the greatest impact in terms of desired ends when such information is tied to the predisposition of the clientele. In our particular situation, the people of our area knew we were coming. They had voted on a bond issue three years before our first classes. The leaders of our community were anxious for us to begin. Some potential students had been waiting for us to begin. The climate in our community was favorable. People were predisposed to listen to us. They were interested in the community college and what it could do for them. This was our point of attack.

(2) Different kinds of people utilize different kinds of mass media. The highly educated (roughly those with more than a high school education) read; those not so highly educated listen. Therefore, the information given to the newspapers reaches a specific audience and should be aimed at that audience. That information given to radio and TV reaches a specific audience and should so be aimed. Within radio and TV it is possible through program analysis to determine more specifically the kind of audience being reached. For example, in our particular situation, spot announcements on country and western shows will reach a different audience from spot announcements close to a news broadcast.

(3) People are more likely to take the advice of and accept the opinions of highly respected community leaders with whom they have face to face contact than experts who are distantly removed. It is important to identify and give information to those individuals who are perceived as leaders by the people of the community. This might be the leader of a community development club, the proprietor of a general store, a school teacher, or a minister, or a local farmer. These people need to be given information that is specific enough so that they can talk in detail to the community about the program of the college. They must themselves be convinced of

the values of the curricula and be able to relate specific information to the potential student. These were guiding principles for us in talking to our community about the curricula we offer. We made a conscious effort to keep educational jargon out of our conversations with community leaders; and yet, we did not talk down to these people. We attempted, and were fairly successful, to talk with practically every civic group in our area. These talks were illustrated with transparencies, showing visually what we were putting across verbally. We developed as rapidly as we could information about specific programs so that we could put this in the hands of the people as we talked. Our admission procedure was formulated well in advance of our opening date so that people could readily learn how to gain admission to the college.

Civic groups, labor unions, ministerial associations, etc., are in a sense captive groups. At least, if you can procure an invitation to speak, you have an audience. The public schools are even more captive. The school superintendents in our area had actively supported and worked for the establishment of our college. As a result, they were predisposed toward helping us get started. They willingly gave of the school's time for us to talk with high school students. We were in each high school at least twice during the year preceding our opening to talk with high school seniors, and in many cases the entire school population, about the college and what it had to offer. We held dinner meetings for school superintendents, principals, and counselors to give them information about us. We requested and received information from them about their students. We followed these initial meetings up after we opened by having other dinner meetings and at these dinners requesting that the school officials give us criticism about the college and what it was doing.

As soon as our buildings were completed, we held Open House for the community and invited everyone from our area to come to the campus and see what their college was like. They came in droves. We invited high school students to tour the campus so that they could see the facilities. We even provided testing space for the Employment Security Commission so that they could administer the General Aptitude Test Battery on our campus, not only for prospective students, but for employees for the new industrial plants that were moving into our area. This helped to get people on campus. It enabled them to see what we had.

If there is one thing I would advise you not to do, it is to become defensive about your college or about a specific program. It is possible for us as professional educators to develop curricula which we view as being very important to our community. Many times, it becomes more important to us personally than to the people we are attempting to serve. Hence, we run the danger of browbeating people into enrolling. This, by and large, does not pay off. We first of all make people

angry or at least displease if we attempt to sell them on something for which they have no desire. If, through persuasion, we are able to recruit students to enroll in programs, the likelihood of their sticking through that program through completion is not very great. On the other hand, if we work with individual students and help them establish realistic goals and they themselves become committed to a particular program of study, they are more likely to become successful.

Currently enrolled students often do a much more effective job in recruitment than the professionals. They talk the language of the prospective enrollee and are approachable for all types of questions. Therefore, the combined effort of the professionals and students may be an effective approach.

To sum up recruitment, then, the important thing is to know the people with whom you are talking, to be able to talk with them at their present level of understanding, and above all, to accept that level of understanding and accept them as individuals. If the community perceives you as one who is genuinely interested in helping them, they will be favorably disposed toward what you have to say.

B. Student Selection

Our college operates under the "Open Door" Admissions Policy. The Open Door Admissions Policy probably means something different to each one of us. It is possible for us to have selective admission practices within an Open Door institution. If our rationale is that anyone may be admitted to the institution, but may not enter the curricula for which he is not suited, as we an institution define suitability, then we are selective. If our concept of the Open Door is that any student may enroll in any program which he desires, then we do not have selective admission requirements.

The goal in selection of students is to have students in programs in which they can be successful. In a new institution you are faced with a challenge to develop a realistic selection process. Selection, whether taken from the standpoint that the institution selects the student for the program, or from the standpoint that the student selects the curriculum within the institution, can work.

If the institution is selecting the students, then the institution must have precise information as to what it offers, what kinds of aptitude, abilities, interests, personality characteristics, are important for success in what it offers. To know this immediately is impossible. To validate professional hunches takes time. There is always adjustment to be made, not only in the kinds of students that go into specific programs, but in the content of specific programs themselves based on the experience gained in a local community. Therefore, it is reasonable to think in terms of a five-year period of time in establishing good selection tools, but at the same time, you cannot wait five years to begin operation. Hence, we looked

at other schools and what they have done. We look at other programs, and at the content of those programs, and at the students in those programs. In this way we established guidelines for selection in the initial years of operation. It is important that data be collected during the initial period of operation so that those guidelines which you have logically established can be empirically validated and perhaps changed as a result of the empirical evidence.

If you philosophy is one which says that the student will select the program, then this same kind of information is needed. In order for a student to make a realistic selection of program, this information must be available to him. You must tell the student what his chance is of success in any given program. If you use this approach, the student selection of program, then you must have the staff and the time to give this information to the students, and to give it in such a way that they can understand what you are saying. You need to draw them a picture, show them based on the information that you have what their chances of success are. Usually, if a student has a very poor chance of success in a given curriculum, he will change his choice. Students don't want to fail. They want to know what they can do. They want to be successful in what they attempt. If you will explain their chances of success to them, if they understand what you are saying to them, and if they still want to try a given program, then the chances are they will be successful. Motivation for a given program is something that we have not been able to measure as yet; but, perhaps one measure of motivation for a particular educational program is a student's persistence in trying that program, even though his chances of success as predicted by the usual kinds of ability tests and aptitude tests are slim. This is the approach we took to selection. We established guidelines for ourselves.

The guidelines were established in two ways. First of all, we looked at our community. We looked at our people. We attempted to find out what they were like. Our high school people helped us with this. The provided us with a great deal of basic information, which enabled us to understand the kinds of abilities and achievements scholastically our people came to us with. We took the kinds of information which we could get and analyzed it in such a way that we could tell our instructional people what our population was like. We fed this analysis back to our high school people so that they could see what we were doing. We developed Rockingham County norms for the School and College Ability Test. We developed Rockingham County norms for the Sequential Test of Educational Progress. This latter test has several parts, and we developed norms for each part. We developed norms also for our own placement test. These are achievement tests in math and English, which we require all entering students to take. These norms, of course, were developed on those students who applied to our institution.

Our guidelines for admission our initial year were as follows: One standard error of measurement below the mean for Rockingham County on SAT, Verbal and Math, a "C" average in high school, for entrance into the college parallel program and all technical programs. In our vocational programs, we used the General Aptitude Test Battery, and sought students who met the occupational aptitude pattern for the particular curriculum they were seeking to enter. We had no cutting scores on the SAT, and we did not always stick to the OAP on the GATB. We did have cutting scores on our placement tests. Students were placed in beginning courses based on their performance on the placement tests. We developed these cutting scores based on logic, what our curriculum programs were designed to be, and the level of educational skill we felt necessary to enter those programs, and also on a state wide study of community colleges in North Carolina which drew these cutting scores for each institution in the system. The state study was in process while we were working our way through this thing. Happily, at least it gave us some assurance that we might be right. Our own methods and the state's empirical methods came out with basically the same results.

We are now developing multiple regression equations to predict the first quarter grade in each program of study. We have already developed such equations on our first year's class. We were able to secure the services of a graduate student to work with this. She did it as a part of her doctoral dissertation. This helped a great deal time wise. We will continue to update and refine our prediction equations across time. This will be an on-going process for us. While we realize that these equations predict, but predict at a fairly low level, for groups of students, we also recognize that for individual students they may not be accurate. Hence, our admission procedure is a continual process of explanation, information giving, self-analysis on the part of the student, and then usually student selection of program. Thus far we have denied admission to only a very few students. Some students we have referred to our County Opportunity Center which works with the mentally retarded. Some students in specialized areas we have denied admission on the basis of personality disorders. This is particularly true with our Associate Degree Nursing Program.

C. Student Characteristics

It is very difficult to get objective handles on the characteristics on our student population. We can give information on the usual kinds of academic tests, which we routinely administer to all entering students. In general, this would show that our students are on the average like the students in the high schools of our county. While the mean is very close to the high school mean, our distribution of scores is skewed to the left. Many of our students are those who could not gain admission to senior colleges and universities. We have many students with high ability test scores, yet low achievement in high school. This probably indicates some home or personal

problem which has not enabled them to achieve, and we fully realize that the best single predictor of success in our programs is the achievement record in high school. We also have students who score low on ability tests but who have performed well in high school. This happens particularly with the small rural high schools, and we find that these people are generally able to achieve. We can give some generalizations about our students otherwise. We have students from all of the social class groupings. Most of our students are from the middle to lower-middle class group. We have students across all financial ranges, but most of our students come from families whose income level is moderate to low. We have students whose family's educational level is very high, but the overwhelming majority of our students come from families whose parents at best have completed high school. In other words, they are first generation college students, and they come to us not knowing what college is like. We have two students who are orientals, a few students who are American Indian, students who are Negro, and students who are Caucasian. About 14% of our students are black. The overwhelming majority are white. (Note: For a better description of student characteristics see -- Cross, Kay Patricia, "The Junior College Student - A Research Description," Copyright 1968, by Educational Testing Service, Princeton, N. J. The price is $1 per copy.)

D. Follow-Up

Now comes the test of what we have been talking about previously. What happens to our students? Our drop-out rate across all programs is approximately thirty per cent. Notice I said approximately. We really don't know what the precise drop-out rate is. Let me talk about that for a minute. If we were to measure our drop-out rate in terms of students who enter programs, and students who complete programs, we would have to say that our drop-out rate would be much greater than thirty per cent, really near to fifty or sixty per cent. However, we don't feel that this is a realistic way of determining our drop-out rate. First of all, we try to determine why the student enrolled, and measure his leaving against his goal. For example, in our college parallel program, we have numerous students who were with us for only one year, and they successfully transferred at the end of that period of time. We have some who were with us for only one quarter, but effected a realistic transfer. We have housewives in the community who want to take a single course. Our state regulations require that they be classified as to program, but they have effectively achieved their objective when they have completed that course. A good example is "An Introduction to Psychology." Another is a beginning foreign language. We found that numerous people want to learn to speak Spanish, at least enough to take a trip to Mexico. In many of our occupational programs -- secretarial science, business administration, data processing -- students often have a desire to learn a specific skill. Many of them come at night to take a course in typing, a course in shorthand, a course in business machines, a course

in principles of supervision, or a course in unit records equipment; and once they have completed that course, they have achieved their objective. It is amazing how many re-entering students we have. These are students who have accomplished immediate objectives, but who after they get back on the job or back in the home decide they want more. They are really not interested in a degree, but they are interested in what they learn. We don't consider these people drop-outs.

There are students we don't know how to classify. For example, we have one student who has been with us now for three years. She has dropped out of the nursing program, is now taking college parallel courses; but she is working full time for the first time in her life, holding and maintaining a job as a nurses aide, and supporting her four children. She is no longer on public welfare, she is not a drop-out, in all probability she will be a drop-out, but how do we classify her?

We know that the overwhelming majority of our occupational students have secured jobs and are working. In many cases, military service for males must come before actual job placement, but there are encouraging things even here because the student who has gained skill when he goes into the service is able to get a better position. Most of our occupational graduates are actually using their skills in the service. At least, this is the feedback we get. This is the result of a survey we ran on our occupational graduates last spring. We got a 90 per cent return on this follow-up study, and we did that by making telephone calls to those who did not initially reply. Here are the results:

All graduates who replied were employed on a full-time basis with two exceptions. One was pregnant, the other was staying home to take care of a sick relative. Sixty-three per cent of the graduates were employed on jobs that were specifically related to their training. Seventeen per cent were employed on jobs that were marginally related to their educational program. Eleven per cent had enlisted in the service or had been drafted, and three per cent were not employed in jobs related to their program of study.

Sixty-five per cent of the graduates were employed in our county; twenty-four per cent were employed outside of our county, but within commuting distance of our county; and most of them retained their residency in our county. Seventy-eight per cent of the graduates are still employed with the company that hired them after they graduated. Eight per cent have changed jobs once since graduation. Now remember that these are only those students who graduated. We have not followed up those students who had specific objectives which did not call for graduation. Remember, also, that this survey was conducted in the summer of our second year of operation in a class which had graduated in the spring.

Student Personnel Services

A. Counseling

Counseling is the key to success for an "Open Door" institution. The assistance a prospective student receives in selecting a program of study is important, not only to the student, but also to the institution. We employed our Director of Student Affairs, who heads our counseling program, fourteen months before we started our first classes. We employed a counselor fourteen months before we started classes, and we employed an additional counselor six months before beginning classes. These people worked with applicants and were involved in setting up the admissions procedures and developing the necessary forms during this period of time. They spent hours of individual time talking with prospective students about the courses which we projected offering. They spent time talking with our instructional staff about the kinds of students they were seeing, about the characteristics of these students. In fact, much of the information which we have already discussed was developed for this purpose.

Upon entrance into the college, each student was assigned an advisor and a counselor. The advisor's responsibility was and is to help the student to plan his program of study. The determination of the program of study is the function of a counselor. This should not be construed to mean that the counselor ceases contact with the student after he has enrolled, because the counselor does indeed continue to work with the student as the student needs help. This is usually on a self-referred basis. If personal problems, a financial problem, educational problems in terms of some study habits or skills, budgeting enough time and that sort of thing occur, students are often referred to counselors by advisors who feel that the counselor may be of assistance to the student. There are also times, for example, when at the end of a quarter when probation lists are published, the counselors actively invite the students to their offices for conferences. It is essential that the counselor and the advisor work closely together if they are to help the student to achieve his educational objective.

Much has been said about the number of counselors needed in proportion to the size of the institution. The rule to follow is fairly well accepted in community college circles now, and indicates the ratio of 1 to 200. There are some fallacies in this 1 to 200 ratio, however. To be realistic, this ratio should reflect counseling time in relation to numbers of students. That is, the counselor should be 100% counselor to every 200 students in the institution. Unfortunately, many times counselor allotments are based on full-time equivalent enrollment. If services are to be provided to the large continuing education population, it is necessary that counselors be allotted on the basis of headcount. It is also true that many times a counselor must do many other things besides counseling. Many times a person classified as a counselor must perform the other student personnel functions as well, such

as coordinating student activities, developing a financial aid program, providing a job placement program, etc. If a counselor has these peripheral duties to perform, he cannot effetively serve 200 people.

B. Housing

Our institution has no dormitories. Our students are commuters, Therefore, we have had no experience with residence halls. We do have students - a relatively small percentage - who rent housing in the local community. We initially developed a housing committee which was comprised of community leaders and one of our counselors. The purpose of this committee was to identify suitable housing for students within the local community. Their activities involved not only the identification of people who were willing to rent rooms or apartments to students, but also to visit these homes to determine that they would be suitable for the students. Through this activity, a listing of the housing in the community was developed, and it was made available to students upon request. The institution took no responsibility for the contract between the student and the landlord. This was left solely to the two parties involved. The college merely served as a clearing house for leads as to housing. I might also add that we have not had sufficient time to follow up with our housing since we opened. The on-going press of students has made it necessary that we place certain priorities, and we have emphasized the counseling function over and above housing. We continue to serve as a clearing house and do maintain a list of housing for students.

C. Recreation

Our college began in the fall of 1966. Our buildings were not completed. Most of our time and energy during that year was spent on getting the instructors and the students together and in providing other necessary services for students. During the past two years, we have found that our students have an interest in intramural sports, and this is provided through our physical education department. We have facilities on campus for some sports and have bused students to other locations for the use of gymnasiums and bowling alleys and golf courses. Before our physical education program was initiated, our students pushed quite heavily for intramural athletics. We had a committee of students, faculty, and staff to work with this; and some recreational activity was effected before the curriculum physical education program began. We are now in the process of building a physical education building which will provide facilities for recreation. We also have on the drawing boards and hope to receive bids shortly on a Student Center building which will also help relieve this problem.

QUESTIONS AND ANSWERS

Gerald B. James, President
Rockingham Community College

QUESTION: David Huntington, Alfred. Would you give a speech on faculty - in other words, what are you using for faculty - where are you finding faculty and what problems do you have between vocational faculty and academic faculty, etc?

If you will study the backgrounds of faculties in most colleges and universities you will find that someone feels that it is well that you have diversed faculty. I remember one of my co-workers said, "You are going to build a new institution - wonderful, you can employ people who will agree with you." I said, "Sir, that's the last thing in the world that I would like to do". We want people who have different backgrounds, different points of view who will disagree and we hope they will learn to disagree agreeably. I think when you challenge what I'm thinking and what I'm saying this forces me to some more thinking, some more studying and herein growth occurs. Therefore, you find on most campuses a rather diversed faculty. One of the worst things that most of us think you can do is fill your faculty with products of your own institution. Our faculty come from (now, remember, we're on the East Coast) as far Southeast as Louisiana and Texas, as far as the Dakota's and then up in the Northeast as Maine - so we cover the eastern United States fairly well. We think that there is some educational value in associating with people from different backgrounds. Notice that most universities will have restrictions on out-of-state students. They won't take more than a certain percentage of out-of-state students. Our students are all commuters, they're all local. Therefore, we place even stronger emphasis on faculty from different backgrounds in order to make up for what we miss by not having students from different backgrounds. Now, where do we get our faculty? Geographically, they come chiefly from the eastern United States. I suppose that about one-fourth of our faculty came directly from graduate schools, about one-fourth from secondary schools (not quite a fourth), about one-fourth we got from other post-high school educational institutions and about one-fourth came from businesses and industries. Now, I split them into fourths - those are generalizations. Of the three-fourths that didn't come directly from business and industry, about one-half of those had some business or industrial experience. I suppose that the greatest difficulty we have had is in locating and securing well-qualified people in the occupational areas. It is not too difficult for us to get people in English and Social Studies. It is more difficult to get well-qualified people in Math, Physics and Chemistry - the sciences. It is far more difficult to get them in Nursing, data processing, machine shop and welding and the skilled areas. (Let me stop there and get you to re-word your question and

I'll take off on it again - I think that I have rambled.

Question: The one question that I'm particularly interested in is whether or not you have degree requirements for these teachers and whether you have ranks? Do you use the same ranks for your vocational people as you do your academic and what kind of internal conflict you have over that issue?

I think the nature of the conference here is such that he wants our biases and prejudices to stick out, so I will not hedge - I'll be rather blunt in it. I am not concerned with the number of degrees one holds, we have no certification requirements, for which I'm thankful. This means that we seek people who have the qualifications whether they have degrees or not is not so important. Incidentally, it is not just that way to me, apparently it is that way to the faculty. We have an autonomous body of the faculty called the Faculty Senate. The chairman of the Faculty Senate has one year of college. He was elected to that position by a faculty at least half of whom have Master's degrees. In whom do they have confidence and whom do they elect for their leader, their spokesman? - a welding instructor - one year of college. I think that I have never seen a group fit together as well and work together as well as this group and it's interesting to me that the people with Master's degrees and beyond have a tremendous respect and admiration for the non-degree people and vice-versa - they operate as a team. We have leaned over backwards to keep them from segregating themselves into "I'm college transfer", I'm one-year occupational", I'm two-year occupational", and it seems to be working that way. So, no, I am not interested in degrees except as it assures a certain level of qualifications, and qualifications can come from experience as well as from going to school. We do not have certification - thus, it is left to us locally to determine what kind of qualifications we are seeking. We do not have faculty rank. Personally, I have no desire to move toward faculty rank, but we have said to the faculty, "If you see a need for and want faculty rank, we'll at least talk about it and give consideration, and we will follow your wishes on it". The faculty have given consideration to it, once rather thoroughly, and they backed away from it. The said, "We're not concerned with it". I hope that answers the question.

QUESTION: Dr. Schuster, Dean of Faculty, Mattatuck Community College, Waterbury, Conn. How many students are there at the institution, that is full-time equivalent, how many on your counseling staff, what role you have the advisors play as compared to the counselors and what accreditation pressures are brought to bear concerning these ratios?

The enrollment of our institution has exceeded the predictions for the institution. We took the formula that seems to be used throughout the nation to project enrollment, it told us that the first year we should expect 250 students and

possibly as many as 300. The second year since we would also have a Sophomore class, we should expect 500 and possibly 600, the third year we would possibly have 750, that is full-time equivalent. The enrollment the first year was 641 opening in the fall, the second year was 1072 and the third year, which is the year we are just finishing, was 1387. Embarrassingly to me, almost half of these people are in the transfer program. I rationalized this two ways. Number one, I indicated to you that our facilities were not quite ready when we moved into them, but a classroom can be readied fairly easily, a machine shop cannot. We could start the transfer program, teaching English, teaching History and the like, much easier that first year - we were'nt ready to begin the occupational programs for some of the facilities just were not ready. Thus, we got started off on a heavy foot on the transfer and a light foot on the occupational. Secondly, we seemed to never have enough money to do the job. Consequently, we did not have enough money to equip all the occupational areas, and we thought it better in some areas not to start at all that first year and even the second year than to start ill-equipped. So, the enrollment in our institution is about 48% transfer and about 52% occupational thus far. I predict that as we are able to get the occupational programs better established that the enrollment will swing more toward about 25 to 33 per cent transfer and two-thirds to three-fourths occupational. If we are realistic in terms of employment opportunities that is the way it will go. (Re-state part of the question again). "How many counselors?" We have a Director of Student Affairs who does a small amount of counseling himself, but chiefly he is not regarded as a counselor. We have four counselors. Now, when I said we had 1387 enrollment, full-time equivalent, we are talking about 3000 people - now, here are four counselors to deal with 3000 people and I said, "Throughout the nation they'll tell you the rule of thumb is about one to two hundred", so you'll see what we are up against. I would hope that we could move as rapidly as possible toward the one to two hundred ratio but there's a financial limitation. I should say this, that in that these people's salaries are paid from state funds we are allotted funds for only three counselors. We, locally, put in enough for the fourth one. This tells you something about our priorities, in other words, if we had a little bit of money locally that we could spend like we want to - what would we do with it? - we bought another counselor, and if we had a little more-what would we do? - we'd get another counselor because this is the heart of the institution and will relate more to the success of the institution than any one thing when you have an Open-Door policy.

"What is the relationship between the professional counselor and the advisors?" The faculty advisor is a program advisor. Each student is assigned a counselor and an advisor. The faculty member being an advisor; the counselor, being a non-teaching person and professionally trained as a counselor. The Director of Student Affairs has his doctorate in guidance and counseling. One of the full-time counselors has the course

work for his doctorate, but has not completed the dissertation. The other three are Master's degree people in counseling. The faculty advisor, then, works with the student in the selection of courses once his program is determined. Once it is determined that I am in, let's say, college transfer and I'm planning to transfer to Duke University and I'm going to be an engineering student - the faculty advisor works with me in selecting courses and getting these courses in the proper sequence as a basis for transferring to Duke without loss of credit. The counselor deals with the student in terms of which programs he should enter initially, and in case I don't do well in that program, helping me to give consideration to other areas to which I might transfer, or helping me to study better and make more effective use of my time as a basis for improving within the program in which I am enrolled.

"What accreditation pressures are brought to bear to increase the number of counselors?" We do have pressure. I'm in the Southern Association and for accrediting purposes, our institution is fully accredited. Once an institution could not become accredited until it had been in operation for five years. We said to them, "There are a number of areas in which one may graduate and cannot be qualified to take the State licensure exam unless he is a graduate of an accredited institution - so if he graduated from one of the new institutions that is not accredited, you can't take the State exam and, furthermore, you'll never be able to take it". So we prevailed upon our accrediting Association to operate on the basis the legal system does - "you're innocent until proven guilty". We said, "Accredit us, showing faith in us until we prove ourselves unworthy, rather than the reverse". So, they set up a rather rigorous set of requirements. If you start with them before you ever start construction and work with them hitting every step of the ladder together, it is possible to become accredited at the end of your second year of operation, and such accreditation then is retroactive to the day you opened. Thus, in our institution every student who has ever taken any course there - took it in an accredited institution. But they really hold your feet to the fire in terms of the next several years to be certain that you keep developing. They do have some rather rigid requirements in terms of faculty qualifications. Thus, what I said earlier about not being concerned with degrees is not wholly true in relationship to the transfer program. All our faculty in the transfer program have Master's degrees or above. I think there's one exception, but even your major universities will have an exception occasionally in specialized areas. When I was a graduate student at the University of Illinois there was a freshman at the University of Illinois who was teaching graduate courses in Music in a specialized area. So, you always hit a few exceptions, let's say in the Arts and things of this kind. So, I guess we face the same pressure then that you do in the transfer area but we don't face this pressure in the occupational areas.

QUESTION: James Fitzgibbons, Hudson Valley Community College. He appreciates the construction design - does this pre-suppose the idea of offering a balanced curriculum offering in that students in transfer programs would be exposed, to quote: Vocational or occupational type programs?

Not by force but by opportunity. If a variety of programs are offered within the institution, a student in the transfer program has an opportunity to elect some courses in the occupational areas, and I contend that this has just as great a liberalizing effect as a student in the occupational programs taking a course in Art or Music. It is not forced but it is available on an elective basis. To what extent do they take advantage of this? Fairly lightly thus far because most of the transfer students are directed by the requirements of the institutions to which they plan to transfer. Thus, they are careful in selecting their electives so as to get the highest degree of elective credit possible. It's there, it's available - it's up to the individual. We do not project forcing this issue.

QUESTION: Mr. Smythe from Wisconsin. What is the source of funds that this institution exists on - budgetary sources - what ratio of the funding from the several sources for the development of the institution since it is fundamentally a county institution, the majority of the students coming from Rockingham County?

In the initial planning for our institution we were thinking in terms of one-third of the financial support being from the State, one-third from the County, and one-third from the students. Since we would not have an institution in each county, we hit trouble in our thinking. There would be a tendency if our county had an institution to want to charge you as an out-of-county student, an out-of-county tuition. This would really be complex, so rather than one-third, one-third, one-third, we shifted and started out raising the state's share of support to 65%, lowering the county's share to 15%. How did we arrive at 15%? We wanted to get it low enough for the county that the county would be willing to pay that portion just in order to have the institution located within that county. Therefore, the citizens of my county said, "We will pay 15% of the support just in order to have the institution located in this county". Any citizen of the state may enroll without paying an additional tuition beyond what the students within the county pay. It's working. I can see some sentiment and some portions of the state against this because some of the institutions have a high degree of out-of-county enrollment. Our enrollment from outside of county is about one-fourth. About three-fourths of our students are from within the county; about one-fourth out-of-county. The out-of-state students pay two and one-half times our regular tuition cost.

"Would you say, then, that you get about 65% of the com-

trol from the state?" No, the legally constituted body responsible for the institution is a Board of Trustees comprised of twelve individuals all of whom by law must be within our county or counties contiguous thereto. They are the policy making body for the institution from a local level. The institution is owned by the trustees who are local. The equipment is purchased by the state and the state does hold title to the equipment. This is so that the equipment can be transferred from one institution to another if an educational need is meet in my institution for this program - we're not stuck with $50,000 worth of equipment - we move that equipment over to your institution and you use it. If after three or twelve years the need has been met there, it can be moved elsewhere. By the way, this has helped immensely.

Publicly supported education in North Carolina comes in three convenient packages: 1) elementary schools and high schools; 2) community colleges and technical institutes; 3) the four year colleges and universities. The community colleges and the technical institutes have a state level staff called the Department of Community Colleges entirely separate from the state level staff for the elementary and secondary schools which is called the Department of Public Instruction. But both of those two systems operate under one state level policy making body called a State Board of Education. Now, even though the institution is a local institution, some direction does come from the state level. We get some advice, some counsel, some co-ordinating functions performed by the Department of Community College's staff and we get some policy making at the state level from the State Board of Education. I would say that we are rather fortunate in that the state does not rule with an iron hand - they give us a high degree of local freedom, but they exercise enough control to see that we do not have duplication unnecessarily. We must be concerned with expense, so every institution does not have, let's say, a computer technology program - we can't afford it. But the state then says, "We can afford six institutions teaching this program", and they will help locate these so as to make them most accessible to the majority of population of the state. So we do get some policy making, some direction from the state level. We get some from local level and fortunately neither is trying to outdo the other - though you do have some bickering back and forth occasionally but having worked at the state level and working at the local level, I can say that I'm quite happy with the working relationships and the degree of understanding we have. Does this help? We have two people from the Department of Community Colleges in the audience, either of them might want to say something about this or you might want to get their point of view on this, because, you see, to me they are part of the hierarchy in the State Capitol.

QUESTION: Charles Laffin, Farmingdale. One, since it is a commuter institution, how is the cost of room and board calculated in the annual cost, and secondly, what is the support for building construction?

I can send my son or daughter to college in North Carolina for a year for $2000. You know, and I know, that about one-half of this cost is the cost of room and board. Therefore, the other half is the cost of instruction. Now, if $1000 is the cost of instruction and we said that the student's share is 20%, the state was paying 65%, the county 15% and then the student's share is about 20%. Therefore, a student's share 20% - 20% times $1000 is $200 - what then does it cost me if my son is living at home - what does it cost him to go to Rockingham Community College for a year? $42.00 tuition per quarter, 4 quarters during the year (I'm talking about a twelve months year here), 4 times 42 would be $168. The only fee, the student activities fee $5.00 per quarter which would be $20.00. - 168 plus 20 would be $188.00, so it's slightly under the $200. Now, for the occupational programs and don't ask me the rational behind this - it is $32.00 per quarter rather than the $42.00. This is by law - I think it should be the same for all, in fact, the cost of the occupational is greater than for the college transfer but the tuition is $32.00 per quarter for the occupational areas, $42.00 for the transfer program and the student activity fee, it doesn't exceed $20.00 per year in any institution is the state.

The second part of the question deals with the buildings. Construction of the buildings is a local concern. The money is local, the state did put a little money in construction, but very little. Many of the institutions have received funds from Higher Education Facilities Act, from Appalachia, from Coastal Plains Fund, and some from the vocational education sources, but basically, the construction of buildings is a local expenditure.

QUESTION: John Talbott, Oklahoma. For those students who are enrolled in occupational education are they required to take the same basic courses in Math, Science, etc. as the transfer student or are these courses taught as applied basic Sciences and Mathematics?

Basically, they do not take the same related courses. The nursing students, with the exception of Biology, and they require a more specialized Biology, do take their related courses along with the college transfer students. I was just looking in Data Processing, their Math requirements are a little more rigorous than the college transfer requirements. The Secretarial Science students take a Math of their own. Basically, the related work is taken separate from the college transfer students. There are a few exceptions, Nursing being one and some over-lap in Data Processing. These are in two-year programs - in the one-year programs there is no over-lapping.

QUESTION: D. A. Blackman, Salt Lake City. How do you evaluate student achievement for advanced placement in the skilled and technical areas?

That's a good question and I cannot help you on it. I would suggest that you ask that one when Parker Wilber gets up here because his institution has been in operation long enough to have thought about that, and worked out something on it, and we have not. Let's suppose that we have a young lady in Secretarial Science and she came through a high school where she had no business courses at all, no Secretarial Science courses at all. Another comes from a high school with an excellent high school program in that area and we're starting them both the same, even treat them the same. No, we're not. Then you say how do you decide where to start them, and I'm ashamed to say this but it's by test of the best we can devise.

QUESTION: What is F.T.E.?

I think I am going to have to ask for help from the audience on this one - he can help you - give you more of the detail than I can. Kenneth Oleson, who is Assistant to the Director of Occupational Branch of the Department of Community Colleges. Ken ---

Basically, F.T.E. is based on this factor - that an individual attending 16 contact hours per week or this times 11 weeks which is the length of our quarters, making it 176 hours is one F.T.E. So, what it really amounts to is very time 16 hours is tallied we mark off an F.T.E., so that it's the number of individuals times clock hours giving a total here that then is divided by the number of hours in the quarter giving us our full-time equivalent. (Do you use this both for vocational and associate degrees? - used for college transfer - for vocational and technical?) Yes, sir, it is. I might also add that it is included in our evening adult extension occupational programs as well as the general evening adult programs.

QUESTION: Clarence Becker from Nassau County. Recognizing the pre-college level training program that a student may have been involved in, do you have a dual or multi-track system or do you have a multi-level system of instruction for these students who have had prior training?

We would have to by proficiency exams start them within the curriculum that we have developed and move them from there forward. We do have, I think, the beginning of an excellent developmental program. This may sound rather harsh toward our secondary school system but approximately 50% of the students entering our institution in the two-year programs, this would include the college transfer program and the two-year occupational programs, take a refresher, a non-credit or developmental Math before they get into what you and I would regard as first year post-high school level Math course. We have a large number of students taking developmental courses, guided studies courses, non-credit courses before they get into the regular curriculum. Ours thus far has not been so much a prob-

lem of advanced standing as it's below the level. Does this help?

QUESTION: How and when is the curriculum developed for occupational education programs?

I went on the job about 25 to 26 months prior to the beginning of classes. Within the 12 months following that, the nucleus of leadership in terms of instruction, Dean of Instruction, a Director of Occupational Programs, a Director of Continuing Education, a Director of College Transfer, Director of Student Affairs, Business Manager - these people were on board. Also, a Counselor and then Department Chairmen started to come in during the following year. Obviously, these people were involved in the determining of direction. But, I think, the key effort in the direction of curriculum development came as a state-wide effort. We had within the Department of Community Colleges a curriculum laboratory. Since we were a state-wide system of institutions growing up together, starting about at the same time and growing up together, why should each of us "Discover America" on our own? Why shouldn't we cooperate? Thus, in most every curriculum area that you could think of there was in existence one or two or more well-qualified consultants from the curriculum laboratory at the state level working with half a dozen teachers throughout the state or people who were employed to teach, working also with two or three representatives of business or industry. Let's take Automotive - there might be two people out of the state office, there might be six teachers making eight and two people representating the automotive industry; a committee of ten people who were giving direction to overall program content. In fact, these people went beyond that level, they went to the level of saying, "What kind of equipment is needed in order to set up this shop or laboratory"?, and they went one step further, "And kinds of books are needed in the Library"? - a primary list, these are a must and a secondary list that we could do without, but it would be better if we had them. So, from this team effort, business and industry representatives, representatives of the faculty within the institutions, the representatives from the curriculum laboratory at the state level working together came out with course syllabi, course outlines. I think, perhaps, that was the major effort, and we did a far better job that way than if each of us had gone off in separate directions.

QUESTION: Lyle Wandrei, Wisconsin. Of the students who have been trained, what percentage of the students are employed in an occupation directly related to the instructional program?

Notice that I indicated earlier this morning that about 65% of our students entered occupational directly related to their area of study and an additional 17% entered occupations that were somewhat related but not directly associated with their training. Well, this is 65% plus 17% - but this is based on two years of operation which is inadequate basis for really drawing any conclusions.

7

QUESTION: Ken Doran, State University of New York. Do you feature cooperative work-study experience in any of your occupational programs?

Thus far in only one program - Welding. We have a major welding industry in our village. This particular industry gets multi-million dollar defense contracts so it's significant. We started off with a 12 months welding program. The advisory committee helped us shift away from that toward one-quarter on campus, then one-quarter in the field, then back on the campus and back in the field. This is working beautifully, and we likely will continue it, but we likely will also go back and add a full-time program.

QUESTION: Spencer Wright, Burlington, Vermont. In your opinion what do you consider a feasible class hour load for a full-time working student enrolled in an evening program?

This is a mean one. Our institution operates from 8 o'clock in the morning until 10:30 in the evening - five days a week. We do not have Saturday classes on our campus, well, we do have, I think, two going on now but that's the exception. All faculty are employed with a clear understanding that they will take their fair share of night work. There is only one institution, one program - that's Rockingham Community College. We don't have a day school and an evening school as such. We just start at 8:00 in the morning and run until 10:30 at night. And if you, as a faculty member, have classes Tuesday and Thursday nights until 10:30 this quarter, we try to arrange it so that you won't get overloaded next quarter late at night, and we also have been able to arrange it so you don't have 8 or 9 o'clock classes the following mornings. But all faculty are employed to take their share of the night hours. Now, we find that we have some students, believe it or not, who are working an 8 hour a day and taking a full load - these are very few but I, personally, can name a half a dozen that do this. We find that we have a large number of students working. In fact one survey last year about mid-year indicated that about one-half of our full time students were working some and the part-time students almost all you see are working some. Generally, I think, you would find that a person tries not to be more than one and a quarter people - if he's working half time, he won't take more than three quarters of a load, if he's going to school full time, tries not to work more than quarter time. If he's working full time, he tries not to go to school more than a quarter of a load. So, we discourage them from taking more than a quarter of a load if they're full time employed, but the hours at night can become really heavy if they are taking even a quarter of a load in some of the occupational areas where credit hours and contact hours differ so widely. (Are you defining a full load as 16 hours?) In some of the occupational areas 16 credit hours, yes, but contact hours would really go beyond that. Let's take Machine Shop or Automotive, you're going to be running contact hours in excess of 20, and in the Nursing program due to the hours in clinical experience in the hospital, it will run in excess of 20.

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

A Presentation by Donald F. Jones, Director, Vocational Division, S.U.N.Y., Agricultural and Technical College at Alfred, New York

I have been asked to share with you the experience that I have had as Director of the Vocational Division of the State University of New York, Agricultural and Technical at Alfred. I will try to be as explicit as possible and to share the real experiences concerning the development of a new vocational program in the State of New York and the problems confronted in doing so.

I listened to the speakers previous to me, and having had many interesting conversations back in the dormitory and lounge with people from other states, I find generally that the type of programs of either a vocational or technical nature which are developed are a result of the circumstances existing in each state. I find, therefore, that one cannot stand in judgement of anybody's program or the efforts that any one state is putting forth. Instead, I found that it is most interesting to try and understand what the other fellow is doing and approach vocational education from his point of view. This is where I have received the most insight.

Let me start by discussing the administrative structure of the State University of New York. There are some 70 units in the State University of New York, two medical centers, and colleges of Arts and Science, 33 community colleges, and of importance to us at this particular meeting, the six agricultural and technical colleges which were established as far back as 1911.

Looking at the administration of the university from where I stand, I see at the top the Board of Trustees of the State University of New York, which is appointed by the governor and then the Central Staff in Albany, our State Capitol, which represents the Chancellor of the State University as far as two-year college units are concerned.

Alfred State College was founded around 1911 and presently has approximately 2,300 technical daytime students taking some 28 different curriculums. The Vocational Division

is located 14 miles from the Alfred Agricultural and Technical Campus. It is located in the Village of Wellsville, and is so situated primarily because there were buildings available at the time we attempted to start the program; and, therefore, we used already existing buildings to get off the ground.

The Agricultural and Technical College at Alfred consists of six instructional divisions: Agricultural Technology, Engineering Technology, Business Technology, Health Technology, Division of Arts and Sciences, and now the Vocational Division.

The real policy making bodies as I see them on the Campus are the Administrative Committee: The Faculty Council, which deals primarily with academic affairs; and the College Council, which is appointed by the governor and is somewhat of a local board of trustees. This College Council is primarily an advisory council to the president, but does have initial responsibilities of appointing the president with the help of the faculty.

Defining Terms and Historial Background

I have mentioned previously when one studies the programs of other states, first take a look at what the educational picture of that state is like in order to better realize why they operate their programs as they do. I would, therefore, like to give you a picture of technical education as we have it in New York State and why we developed vocational programs in the State.

Up until 1966, the Agricultural and Technical College at Alfred operated only what are known in New York State as technical programs. What does this mean as far as New York State is concerned? First of all, the courses are of college level. This can be an ambiguous term; but I am trying to illustrate them as comparable to other college courses taught at four-year college campuses in terms of the amount of effort, the amount of outside homework, and the amount of depth. For example, in most of our technical programs related to the electrical or mechanical programs, students are required to go through from one to three units of calculus and physics. There are selective admissions programs of these particular technical curriculums. It states right in the catalog that students should be in the upper half of their graduating class. There are definite prerequisite courses that must have been taken in high school or in a preparatory school prior to admissions such as two or three units of math and physics. There are definite cut off scores on state sponsored entrance examinations. Once enrolled in the curriculum, a minimum of one-third of the technical curriculum requirements must be in the fields of arts and sciences. If we looked at the finished product, the graduate would be trained nearest to the level of the professional employee. There is a very limited amount of actual "hands on" application.

I would like, at this point, to refer to the question

presented by the gentleman from Vermont. I was in one of the "buzz" sessions in the afternoon where he couldn't get over the fact that at Delhi Tech, students in the construction technology curriculum were studying calculus. At Alfred, they not only study calculus but they study two units of calculus and additional physics. I use this point to stress, just one more time, that technical education at New York State technical colleges is nearest to a four-year college program that we can get.

Now enters the community college development around the 1950's. As these community colleges developed, the first ones were quite heavy on transfer parallel programs. It is interesting to hear the other speakers mention that this was true also of the states from which they came. Any technical programs that were introduced were only those technical programs which served the immediate local needs and were generally of the more sophisticated type such as electrial technology. Although they were orginally developed under the idea that they would be open door admission type of colleges, the level of the training once they were in the community college was about the same as we would find at the agricultural and technical colleges. As a result of this, there was and still is a relatively high rate of attrition from community colleges.

When this reaches back into the high school, and the guidance counselors see that in order to be successful the students must be of the upper half of their graduating class, then that is about all they recommend for entrance to these community colleges. This leaves us with a large percentage of students graduating each year from the high schools of New York State with literally no place to go for post-secondary technical or vocational education.

For a number of years, many of us teaching at the agricultural and technical colleges felt the heavy push by the counselors in the state for the development of programs applicable to the background, abilities, and interests of that large section of high school graduates not either interested or able to follow technical programs as carried out in New York State. It is interesting to note that many of them mentioned that the only place they had available was the Williamsport Technical Institute across the border in New York State, and they could not understand why New York State could not provide programs similar to those at Williamsport Tech. Many of us as faculty members at this early stage of the game found on the exit interviews of students after dismissal notices had been handed out, that one reason they were unsuccessful in their technical programs was that they were not prepared well enough due to their abilities or interests; and these technical programs were not exactly what they wanted.

In 1966, Chancellor Gould issued a proclamation, in the form of a letter to the presidents of the various state units, calling for the formation of committees called "Committees

for Innovation and Change." Making a long story short, such a committee was formed at Alfred; and among the many things that were brought into this committee was the idea of developing a vocational division to meet this rapidly growing need for vocational "hands on" education in New York State. The idea was sold to President Huntington, who took a committee of us to Albany where it was met with approval by Central Staff.

The problem was where to start the program. There was not ample space at Alfred to carry on the kinds of "hands on" operation that many of us envisioned such a program to need. There were not rooms enough, dorms enough, water or sewers enough for an envisioned growth that we could see would be needed for this kind of program.

Fourteen miles away, there was the largest center of population in Allegany County, a village of 8,000 people. There were existing ten empty buildings, formerly belonging to the Sinclair Oil Refinery, made of brick construction; it was not unusual to find empty laboratory buildings with as much as five to seven thousand square feet each. One building, for example, had two floors with 5,500 square feet on each floor. This then seemed like an ideal place to start a vocational program--to at least get it off the ground.

Vocational Education at Alfred

The vocational programs offered on the Wellsville Campus are definitely of the "hands on" type of learning. It is a no-nonsense type of education where the student learns to do by doing. The entrance requirements are: The applicant must be a high school graduate, and he must be recommended by a school official as having general aptitudes or interests for the program. Other than this, we do not want to try and compare transcripts to see who had the highest grade in geometry or who stood highest on some English examination. I can honestly say that I have only seen two transcripts of any of the students ever having been admitted to the Vocational Division. I am not interested in what they have done in the past, I am interested in how well they want to do in the future. I am asking that they be a high school graduate because then I am satisfied with the fact that they have achieved the minimum level of general education specified by the State of New York, and then I feel that we can concentrate primarily on teaching them the vocational skills they will need to go and get on the job and into the economic stream. I am trying to tell you that we do not try to further their general education in the Vocational Division, instead we are trying to prepare them pragmatically and specifically for job entry.

Students attending the Vocational Division attend classes six hours a day, five days a week, for a total of thirty hours of instruction. This is broken down so that the student spends approximately one hour a day in class or lecture as it's most commonly known in colleges, with about five hours a day in shop.

This means that each student receives a minimum of 25 hours a week in the shop working with "hands on" projects. We are extremely short of space and in order to accommodate the need of students in New York State, we are presently operating on two complete shifts--a daytime shift and a later afternoon and evening shift.

We have tried to impress on students the importance of continuing education programs in New York State, and the idea that their education is not finished here because they have learned the basic vocational skills to get on the job. We try to impress on them that all of the centers, the four-year colleges, are offering evening extension courses which will provide them with the ability to keep up-to-date and to enlarge on the education that they are getting. We are finding, for example, that a large number of them have enrolled in further educational courses in evening programs such as Rochester Institute of Technology, the University of Buffalo, or the various community colleges such as Erie County Tech, located within the State of New York. We feel that although we don't offer a degree, that this is the channel the students can enlarge on and grow professionally in through developing continuing education programs of their own.

The Curriculum and Its Development

Initially this was a pilot program. This gave us the ability to innovate. We had no pattern to follow and it was a first in New York State. In developing the curriculum, there were three things we had to consider: what programs should we start with, what philosophy, point of view, or objectives would we take in establishing these curriculums, and then the actual content of the courses themselves. The primary tools used in helping us to establish what curriculums to start with were some surveys done by the New York State Employment Service. One survey was entitled the Inventory of Job Openings in the State of New York. I'll put this overlay on the screen and you'll be able to see the kinds of information this offers. You will notice if you don't use any one month, but a collection over a year or number of years of this type of data, the outstanding labor supply needs can be found quite rapidly not only in the state but by districts in the state such as the New York Metropolitan area, the Buffalo area, the Utica area, or the Syracuse area. Notice on the second overlay entitled Labor Supply and Demand Summary for New York State, that this breaks down the various occupations according to the Dictionary of Occupational Titles and actually shows the demand or a surplus of these individual jobs according to districts such as Syracuse, Buffalo, Rochester, or the metropolitan area. These things, when studied over a period of years, do give us a good insight into supply and demand of varying kinds of occupations. Another tool we did use was an advisory committee made up of faculty, high school guidance people, industrial people, and employment representatives. We also made individual industrial visits to local industries--and by local, I don't mean in the

immediate community, but local as far as within a hundred miles is concerned. We arrived at five basic curriculums: Automotive Specialist Curriculum, Building Construction, Drafting, Electrial Services, and Food Service.

Philosophy, Point of View or Objectives

In New York State, if you start mentioning vocational programs at the college level, the first thing that many people think about is either to water down the technical programs, cut short one of the technical programs, include everything but what's called technical, or to in some way make it as short a time as possible. There seems to be some belief somewhere that just because it's vocational or a certificate program, you don't need to spend as much time, sweat, blood, or tears in trying to produce the program. I know that my own president has mentioned at times that we seem in education to sentence people to certain periods of time. We sentence them to four years for a baccalaureate program or we sentence them for less than that for vocational programs. It's like saying someone has had three years of French. What does that really mean? Can he speak it, can he write it, can he read it, is he proficient? In other words, what relationship does time have to the actual teaching of the course. One industrialist and educator that we talked to said that for too long in New York State in vocational education beyond the high school we have been been serving a lunch instead of a dinner. It is about time we began to serve dinner to people interested in the practical vocational "hands on" occupational programs.

The development of curriculum, as far as time went, was based on what industrialists and advisory committee members felt was really needed in the overall picture. One thing that we did try to do in the development of these curriculums was to keep them relatively broad in terms of occupational competency. We did not train for just a carpenter or just a brick layer, instead in the construction curriculum we tried, for example, to train for the many skills that are germane to the construction industry. In the event that the student would enter one of the very many phases of this program, he would have the skills or competencies to do so. Another thing, we have to live within the establishment. People say "how long is your course?" To provide an answer we say two years, but really we don't sentence a student to two years. We try to take students where they are when they enter our program in terms of their occupational competencies. For example, in one instance a student may have had some of these vocational programs in high school. In terms of our own goals, we then try to determine where that student is and then carry him from that point up to our proficiency levels that we require for graduation. He, therefore, is not sentenced to time but sentenced to a definite level of proficiency for graduation. In some cases this may take longer than two years, depending on how long it takes the student to develop these proficiencies and how much he really wants to stay with the

learning of these proficiencies.

Our faculty insist and continue to carry the attitude that they do not each subjects or courses, they teach students. There are definite problems with this idea of advanced standing and starting students where they are in terms of curriculum. For example, we find we have very little attrition from the freshmen to the senior year. If we are to start students on an advanced basis, this means that somewhere we have to either crowd the senior area or take in fewer freshmen students. A question comes now--where do you put the p. mary emphasis--on the students that have never had an oppor .ity to learn the skills and who want to learn them, or do you put your emphasis on those who have already started to learn the skills and want to come in on advanced standing? My idea would be to expand these kinds of programs in New York State to the point where we could allow for both.

Student Recruitment

The recruitment of students for the Vocational Division is done as an integral and regular part of the admissions for the college itself. The regular admissions staff visits the high schools on their routine visits in Western New York carrying information about the curriculums on the Wellsville Campus right along with the information concerning the technical programs on the Main Campus. Both the admissions people and some of the faculty and counselors on the Vocational Division staff do visit high schools for career days and/or college nights. We have printed brochures and college catalog supplements which are mailable and passed out to students and visitors alike as they come to the campus. We have many students visiting our campus, usually in small or large bus loads, from the various schools in New York State. Each fall, in October, we do have what is called a Fall Festival Day, where students from all over Western New York are invited to come in. The total day is spent taking students through the various classes and curriculums with students in attendance where they can see what kind of training the students receive and the classrooms and laboratories. One thing I intend to do however, after visiting Delhi and noticing their excellent and warm welcome signs as you approach the campus, is to put similar signs in front of the Wellsville Vocational Division Campus.

Student Selection

Reviewing the aspect of student selection, I would again like to say that the only requirement we have is they be a high school graduate or hold an equivalency diploma and be recommended by their school officials. At the present time, we are trying to develop some tests of aptitude and interest for predictive purposes. We hope we will be able to administer these to students while still in high school, therefore, using these as part of the tools or material to help select students or guide them into the programs that they are best

suited for or hold the strongest aptitudes. Presently, we are using the Minnesota Vocational Interest Inventory, the Strong Vocational Interest Blank, the 16 Personality Factor Test and the revised Minnesota Paper Form Board. These tests are presently given to all freshmen during the two-day orientation visit that they spend on the campus before entering school in the fall. One word about this orientation; we feel it is important for students to be oriented to the college before coming. The students and their parents are brought to the campus for two days. They stay overnight in the dorms on the Main Campus. They meet the faculty and division heads. They visit the classrooms and have ample time to ask questions. During this visit, the tests are ministered to provide for future reference.

Over a two-year period, we have received 1,403 applications to the Vocational Division. We were able to accept a total of 440. This means 963 high school graduates in the Western part of New York State did not receive an opportunity to study vocational education although they desired to do so.

Student Characteristics

It is always interesting to try and discover what your students are like. The students of the Vocational Division in a recent study made of the freshmen classes over a period of tow years showed that the high school average of these students was 73.8. To compare this to the Technical Divisions for some meaning we would find the average high school average of students in the Technical Program was 80%. The Regents Scholarship Examination given to entering freshmen of State University units for the Vocational Division showed that the average score was 100.8, and for the students in the Technical Divisions at Alfred, the average was 150.

Follow-Up Program

A lot of effort is taken to follow up students of the Vocational Division. It starts, first of all, just previous to graduation when each student is given a personal exit interview, as we call it, to try and get their impressions of the courses they took, the curriculum in general, the shops and laboratories and also to gain any information we can concerning their employment offers. After they have been out one year, we mail a form for information. This form is being placed on the screen. It is a very general, simple form. The plan is to repeat the process five years later to see what gain has been made in either their salary or position or how long they stay with the job they were trained for.

Student Personnel Services

We have an Associate Dean of Students on the campus who is also acting as Assistant Director at the present time. His primary responsibilities are in terms of overseeing the

counseling, housing, medical services, and student activities for the Wellsville Division. He has working under him the Vocational Counselor and the Director of Student Activities who coordinate with the Counseling Center on the Main Campus. These men represent primarily extensions of the Main Campus operations but deal primarily with student relationships and problems on the Wellsville Campus.

Housing is an extreme critical issue in Wellsville. At the present time, we have only the homes of the residents in the Village of Wellsville to place students. We presently have well over 330 living in private housing in the Wellsville area. We have just about reached the saturation point. Before any more future growth of the campus could take place, I feel definitely some form of housing from some sources needs to be found or developed.

Facility Design and Development

At the time we tried to establish the Vocational Division, the problem was where to start the program, and what facilities could be used. It was evident that it would take years to try and build, or to get the legislature to provide the monies to build facilities for such a program, so we endeavored to find buildings that we could readily use that were already in existence. The site selected for this was the former Sinclair Refinery in Wellsville, which included their rather large storage warehouses, business offices, and time clock houses, which provided sufficient facilities to get the program started. These buildings were basically very adaptable to vocational programs as I hope to show you through a series of slides. If I were to say any one thing about facility design and development, it would be this: instead of some architectural office or some bureau of planning coming up with some standardized idea of square footages for lab, I think in order to do the best job in vocational education one has to decide what courses are going to be taught and how they are to be taught. Let's consider these things first and then decide how much room is needed to do the job properly. I'd like to use a specific instance to show you what I mean by this concept. If, for example, someone decides that in an automotive lab we should use 200 square feet per student, this all sounds fine, until someone decides we are going to have four dynamometer testers, three front-end alignment machines of the drive on type, two wash racks, and so on down the line, which were'nt even considered as part of laboratory equipment at the time 200 square feet of footage was used in the consideration of lab design. In other words, it is very important consideration be given to what is being taught, and how it will be taught, and what equipment will be in it--then decide the square footage of room necessary.

Before closing I would like to reply to one or two of the questions that have been presented to other speakers, and

I feel rather strongly about. One is "how do you develop an attitude of work on your particular campus?" At Wellsville we have some very definite ideas about this. For example, one of the things we do is to have varying kinds of dress depending on the kind of curriculum we are in. A specific example is in the drafting curriculum in which we are trying to prepare these men for drafting offices. There students do wear shirts and ties because they have been taken to drafting offices where this seems to be the rule of the day. They see this, no one has to press the issue with them. If this isn't the way they like to dress and isn't the kind of atmosphere they like to work in, perhaps drafting is not their cup of tea. This is also true in the automotive department. There we do have a basic uniform the students wear. It is a blue uniform with the idea that we want to make these people start out being by somewhat professional in appearance. This gives them the attitude of pride, and perhaps they will carry this out when they get on the job so that some greasy outfit isn't crawling across the seat of somebody's new automobile.

One question submitted was, "how do we in vocational education answer the critics who say that all we should be teaching in our two-year college programs are the academic areas in preparing primarily for the first two years of a four-year college?" I am not smart enough to come up with all of the answers myself, but I read an excellent answer by John Gardner, former Secretary of Health, Education, and Welfare, who said, "the two-year college that takes its greatest pride in sharing only in the glory of someone else's degree soon loses its own identity; and those academic students who fail to go on and enroll in four-year college programs are somewhat lost as far as the economic society in which we live today. They never have completed really anything. They might be comparable to General Motors, for example, trying to market only the front half of a Cadillac." This same gentleman made the statement that brings home one other feeling I have for vocational education, and that is "a society that praises the study of philosophy primarily because philosophy is a dignified field of endeavor and frowns or scorns at plumbing because of its humble nature will find that if it does not provide excellence in both, neither pipes nor ideas will hold very much water."

QUESTIONS AND ANSWERS

Donald F. Jones, Director
Vocational Division
Agricultural and Technical College
Alfred, New York

Question: What was the selection process in connection with application to Alfred?

I am afraid if I told you the truth, you wouldn't believe it - it was entirely on a first come, first served basis, and it concerns me a little bit and I just had a discussion out here on this. I find that in a very large school like Greece-Chili in New York State that graduates well over a 1000 seniors every year that they have guidance counselors for different stages of students; those that are going on for intensive four year programs, those that are going on in technical programs, and those that are what they call "non-college" bound. They start them right off in the fall counseling them in programs of a vocational nature and they apply early and get in. The small rural high school like Delhi or Alfred there seems to be a better dignity in their profession if they place them in Harvard, Dartmouth or Princeton and by the time they get down to those that are non-college bound it's April or May before they graduate - they submit their application and then we're full. So that in terms of the vocational division at Wellsville, out of 420 students less than 70 are commuters and the rest are from more than 50 miles away.

Question: Mr. Gray, State Education Department, New York. Question relates to requirement recruitment of faculty.

Thanks a lot, Larry. There were lots of people wanting this and I said to Larry, "Would you please ask this question so I can get it aired out on the floor?" So, here goes -- first of all, just as in any vocational program, we try to hire the people that know how to do the job - to do the job as the journeyman sees it. So on the faculty at Wellsville there are only three that have degrees of B.S. nature. There are more that do have the A.A. degree but there isn't anybody unless the exception of a temporary person that has less than ten years of experience in his field. Now this brings, I know, a lot of questions and maybe I can explain it to you ahead of time. Now, with a big technical program like we've got on the Main Campus with academic ranks, instructor, assistant professor, associate professor and professor which we do have and with exact criteria for each academic rank and with a pay scale that is tied to those criteria for each academic rank how do you make out? We make out just fine, but I think it's luck that we make out just fine because the faculty at Alfred said, "We don't care what you pay those men, we really don't, because we know that in order to get a man that can really do a

job in many of these fields that you've got to pay him and pay him heavy. The only thing that we don't want you to do is to "fog up" our academic ranks, in other words, if we say that it takes a B.S. degree as a minimum requirement for an instructor's rank and if you say you are using an instructor's rank then you require a Bachelor of Science degree for a requirement. If you are going to call your man an assistant professor then he better have his B.S. degree and either his Master's or 30 additional hours or don't you dare call him an assistant professor, and if you're going to call him an associate professor, he'd better have 180 hours or his Master's and an additional number of hours or don't you dare call him that - but as far as what you pay him, we don't care." So as far as Ken Doran is concerned in Albany, we have instructors, assistant professors, associate professors and professors. But, on the Wellsville campus we have assistant instructors, vocational; associate instructors, vocational; and instructor, vocational, and a senior instructor, vocational and everyone ends up calling them instructors. Now, they as a group sat down and over a period of about one year set up and established the basic criteria for reaching each of these academic ranks, they themselves. How did they do this? They elected among themselves what is known as a promotion and tenure committee, and with the direction and help of the academic dean, the president of the college, myself and the help of some other teachers. Let me bring one thing in why a lot of these things seem to work - when we began to operate this division, the president said that one of the things we need is an ad hoc committee between the two campuses made up of the faculties of the two so we can always be together and no one is hiding under a bushel anything the other is doing. So this ad hoc committee meets once a week or once every two weeks depending on what the needs are. They discuss these things and many of these people were on this committee of promotion and tenure so they help decide what might be some of these issues in terms of meeting requirements. So, basis cally, to answer your question, number one, they are people primarily from the trade areas, many of them have associate degrees and have been out on the job for ten years or more, a very few have bachelor's - one that has the bachelor's, for the benefit of Mr. Oleson and the others from North Carolina, the one man in food service ran the Mamossa Inn in N. C. for eleven years, but he has the practical experience. The one thing we are finding out is that, I don't know if Dr. Huntington knows it or not, but one of the faculty that was interviewing for the Main Campus in construction technology also talked to me - he did have a Master's degree but was ineligible to teach on my campus because he had less than one year's experience in the field. So, even though he met the academic requirements for an assistant professor, he was ineligible as even an assistant instructor on our campus because he had less than the minimum requirements established by the faculty in terms of experience.

Question: Dr. Ponitz from Michigan. First question is: how are the characteristics of the student in the

vocational program compare with the technical, and then the second question is: what are the opportunities for these students to slide over into - I presume you are referring to the Associate Degree program or something like this.

First, Dr. Ponitz, in regard to the characteristics of the students - really, I firmly believe, personally, that most of the students in our technical programs would be acceptable in four-year programs. I think I would be kidding you if I said anything else. I think they would be acceptable in terms of their high school grades, and in terms of the pre-requisite courses. I think they are there because, number one, either like this form of technical work and dread the thought of four years of education or like some I know, personally, felt that Clarkson is quite a bit farther from home and I can get the first two years at Alfred and transfer - so, I think that characteristic-wise there would not be an awful lot of difference. Now, as to your second question - about being able to articulate between the two programs, they can articulate but what I really think you mean is that if a boy wants to take two years at our program on the Wellsville campus in vocational studies, how much credit would he be allowed when he transferred into the Associate Degree program - and, I think, to be more than honest with you, I would have to say probably very little except within the major field. Let me use a specific illustration - if he was in our drafting department and we have had students that did this, and he transferred into the design option in Mechanical Technology so far they have not required them to take any drafting because George Whitney, who is divisional chairman, say, "My God, our kids only get 300 hours of drafting and this kids got 1800 hours - why buy the drafting?" But the strength of the materials, the statics and these things - the calculus, math and physics are his necessity so don't try to kid these kids but I'll tell you what we do - this vocational counselor is a "cracker-jack" and he tries to diagnosis these kids early - he thinks if there is somebody here that has plenty of potential and might be misplaced or misguided, we try to get these moved over fast, but we don't try to pretend to a kid that we are trying to "prep" him for anything other than preparing him for a good job.

Question: Mr. Fichera of New Jersey. What is the final cost to the student at the full program at Alfred and secondly, would you speak to the advantages and disadvantages of the residential component.

The cost to the student, basically, on terms - let's forget room and board for now, but in terms of college cost. The tuition would be $200 a year and a State fee of $25. In addition to this he has a student activities fee which varies but with a maximum of $70, in addition to this there may be some laboratory fees individually for departments but most of these do not exceed $10 - so, $225, a maximum of $70 student activities fee, and a maximum of $10 laboratory fee.

The room and board, I will have to explain this to you - we do not have dormitories at Wellsville nor do we put students into the dorms on the Alfred campus. The only thing that we have to lean on are the private homes in the Wellsville community, which is a community of 8000 people. We've hit the limit - if somebody said, "Look you can take on another 50 students" - I would really have to say that I wish we could, but there is just no place to put them. There are advantages and disadvantages, I believe, in residential or commuter college because they live all the area around - in fact, we have a bus just like the high school that goes around and picks the students up and brings them in in the morning for those who don't have cars. So, I guess, you'll have to ask someone in the technical division -- possibly Dr. Kunsela or Dr. Huntington from the standpoint of managing a campus with dorms. We have housing of the type that's out in the community. Did I answer that close enough for you?

(Yes, sir)

Question: Mr. Schwetz from Michigan. What is the community involvement in the establishment of these programs as it refers to budgeting, advisory councils, etc.

In order to answer your question, I'd have to separate between the Community Colleges and the Ag & Tech Colleges because the Ag & Tech Colleges have been established way early, in terms of 1911. Now, how are they financed - the Ag & Tech Colleges? The Ag & Tech Colleges are totally financed by the State budget. I sit down as a divisional chairman of a vocational division, and I prepare a budget two years in advance. For example, this November I will be making the 1971 and 1972 budget. The 1970-71 has already been in Albany and reviewed, and it will be passed by local staff people in terms of budget, sent back and then sent to the Legislature for approval, and then I'm told by the Legislature what I have to spend. Now, because of this you could essentially say that the people that determine what you'll teach are the State legislators because if I wanted to start a program in let's say - airpower mechanics, I'd first have to submit a request of the curriculum to our Central Staff who would pass and review on this, and by Central Staff, I'm talking about Dr. Martorana and so on - his staff, to look at this but it would have first gone through our local curriculum committee, through our president and then to the Central Staff. Then, they in turn would submit it in terms of equipment approvals and increases in student numbers - see in even more students, you have to have more budget monies so then the legislators in the final analysis would determine whether or not you would have it. Now let's turn around and talk about the Community Colleges for just a minute - one-third of the financing of the Community College comes from the student, one-third from the community and one-third from the state and I'm going to have to ask someone to correct me here - if the State does a little more in terms of capital construction,

don't they in Community - (50-50) on capital construction but in terms of everyday financing - one-third, one-third and one-third. Now, the Community Colleges are given quite a bit of autonomy in terms of their operation because they are a community center and so, yes, the local community has a great deal to say about whether or not there will be, for example, technical programs even offered. In terms of budget, the Supervisors of the towns or the community will have a great deal to say about their budgets. Usually, if I'm not wrong, the State will do their share - their one-third of what the local community agrees to - am I right? -- usually follow through (State's share is automatic) - one-third of an approved budget, so they don't quibble about that. So, really, you could say that approval of curriculum starts at the local level with the Community Colleges -- (approved budget) - thank you, Ken. Have I made this clear - the difference? Was there any other part to that question? Community College? - Gee, honestly, I don't know as I've never been with a Community College as such. May I defer this to Dr. Doran - who establishes the location of the Community College in an area?

(Dr. Doran): A Community College, by the definition, is locally operated and administered institution under only the general supervision of the State University of New York. Therefore, the initation of the Community College project is entirely a local enterprise and starts with a volunteer citizens group usually assembling themselves with the needs of that county or municipality where there will be sufficient student potential justified in that county, and whether the assessed valuation of the proposed sponsorship area is sufficient to require 150 million assessed valuation as the minimum and the potential area will have about 500 students. If the citizen's survey reveals the likelihood that this community can support a Community College then they have to set up another local sponsor - mostly it is the county legislature. It will take on responsibility as a co-sponsor. The proposal then comes from the local would-be sponsor to the State University of New York for evaluation in terms of the likelihood for a college. If the decision is favorable then the State University of New York Board of Trustees issues a charter to the new college.

Question: Charles Laffin, Farmingdale, N. Y. The question relates to the problems and possibilities, the appropriateness of intergrating the vocational program at Alfred with the main campus in terms of students, faculty, residence and all the rest of it.

Really, this is quite clear to me and really provides no problem at all. The answer to this largely is where you are located. In Alfred, which is a very small rural community with a little village, - how many are there now? - (3,000). Gee, when I came in '55 I was sure there were 1,000 - I didn't know it grew any! They have very limited facilities - for example, since I've been there they have had

to drill four additional water wells. The reason is that, in fact, the last one had to go up on a higher hill because they built two houses on a plateau that the water wouldn't run to by gravity, so they had to go up and drill another one.

The reason is that there are already three colleges there, all of which have growth plans; for example, Alfred Tech is scheduled to go over 3,000 students by '75, now the University isn't sitting still, the University is growing - it's going well over 3,000 students. I'm sure that the College of Ceramics, the only College of Ceramics in the whole state, isn't going to sit still - it's going to grow. Now, if we're going to allow vocational education to grow also at Alfred, we're going to run into a point where in the world - I don't want to be on the low ground when somebody flushes a toilet - that's what I'm afraid of! And I think that's it's primarily a case of now, if you want to talk about it psychologically would there be any problem? Heck, no. If you think, for example, that just because a boy is studying, for example, the building construction trades that he's looked on as a second-class citizen - I know I had one of the construction tech boys in surveying option say, "Yeah, he feels bad and laughs all the way to the pay check." They don't seem to look at this in any light that the guy's a second-class citizen. Just the same with our faculty, they say, "Look, we don't care what you pay them, those same vocational faculty run under the exact same salary schedule per rank, only having to meet different requirements," and it's because of our own faculty that they do - not because of them. Our own faculty said, "If you're going to do this - do it <u>good</u> and pay them well and get the best - don't do a second-class job. What we're afraid of Jones is you'll do a second-rate job." These are men that I've worked with eleven years. So, there's really no problem there - I'll tell you where the real problem might be, and here's what could be, and I don't know if you can control this or not. Let's assume that it's a residential college and they all live in dormitories, there isn't the exact outside homework in these vocational programs that there is in the technical programs. If these technical programs, as you see, with calculus, physics, analytical geometry, English literature, economics and history - there's a tremendous amount of outside work, and now, you put this group in a dorm with students who have less and there's liable to be some problems in terms of noise and not having the same amount of work to do. This could be a problem, although you could solve that by putting them in different dorms. But this a a basic linguistic problem but as far as looking at them as second-class citizens, we don't find that on our campus and you know, it's funny, but I don't find all of a sudden the campus at Alfred is one campus with a road between them. You know, we don't think anything in Erie County Tech of building three campuses, one in Hamburg, one in Williamsville, one in Clarence - they're all the same. Really, I think people create this second-class citizenship - they think, well, they must be different because they've got to be different but really they aren't. Faculty

members serve on the same committees - we have vocational divisional faculty serving on this faculty council, that I talked about, deciding whether curriculums and technical education will be accepted and in turn the vocational teachers come to the faculty council with possible curriculums to be operated in the vocational division. I sit on the administrative committee along with my colleagues in technical education. Really, I think that a lot of these problems are self created, so I see no problem.

Question: Frederick Otto, of Maryland. What is the cost per student for the vocational program - how does it compare to the cost with the technical programs and the third question - to what degree is the dormitory program self-sustaining?

Fred, I can only answer part of your question. I would not want to presume to be able to tell you I could answer all of it. For example, I can tell you how much it costs to train a vocational student this past year at Wellsville. I can do this because I even have to rent the facilities. So, I have everything - the monies that go for the faculty, the supplies and expenses, equipment, temporary services, grounds - everything - even the building costs because we rent them, and it cost me $1295 per student to train a vocational student last year at Wellsville, All I did was take my total budget, divide it by 402 students - you see, I have no capital investments because I rent the buildings. If there is capital investments, the guy that owns the building, the lessee or lessor - he does the improving and increases my rent, so I have that as a bill - so I'm talking about total operating budget, divided by students, which includes everything, was $1295 - less than $1300. I have no idea how much it costs for a technical student - I don't know how we would arrive at that with capital construction. Maybe, there are people that do, and I have no idea how or what part of the dorms are self-supporting. Now, perhaps there is someone here who does - is there anyone? Dr. Huntington, perhaps could help you - really, Fred, I will have to defer this -------

(Dr. Huntington): The information that he described at $1280 some dollars does not include the administrative costs that are absorbed at Alfred, the registrar, the admissions office, the president, the vice-president, dean of students - all of these - but don't get the impression that it is an inexpensive form of education - more costly than technical education at Alfred. It should be because of a lower student-faculty ratio for this program. The question on dormitories - the State is trying to make the dormitories self-sufficient. Well, the dorm rates are getting up to $550 a year and the scene is such that it amounts to $200 per student and the cost to the State is $750 a year.

Question: Mr. Smythe of Wisconsin. Wants to know about what opportunities are for women in vocational education

and what's the percentage of the enrollment for females?

It's lousy, I can tell you that. We have 402 students. This past fall we had 22 females. Majority of these were in the food service curriculum area; three were in drafting. I think you've got a point in terms of giving a thought to the female. However, for two years we've tried to get a program off in terms of getting federal funds to help us - just for girls in a clerical-typist or machine-clerical office machines program. We are still hoping to be able to do that for this fall, but I think you have a very good point that there's a large area that has been neglected in terms of vocational programs for young women.

Question: Mr. Plenke from Wisconsin. What are the plans and to some extent this questions is addressed to everyone--about the expansion of the opportunities in programs in vocational education, including such things as consumer education, all the rest of it--all of which has some guidelines from the Federal office in terms of expansion of vocational education programs-- is that the essence of your question, John?

As far as Wellsville is concerned - in terms of future programs and so on, I think I would have to be more than honest to say that we have reached our limit. We have absolutely had the course until we are able to get facility, construction or housing improvement in one form or another. Maybe, this isn't bad. Maybe, this is all right; maybe, this is where it should be. But in terms of being able to do more with what we have, we just can't do it because there just isn't the room or as Dave Huntington said, "What about between 12 and 4 in the morning?" Maybe, we could do something there but there's the problem of where are we going to house them - we still run into that problem, so we just have reached our limit there. As far as social programs, we are trying to do some things. We are working with some of these projects, like project - REACH, for disadvantaged people in rural areas working with social problems and so on. For example, in our building construction course we are actually constructing pre-fab in our facilities - low cost housing for rural poverty people that have settled out of the migrant stream. Priest Father Wider in this area is getting the money through FHA, buying the materials, we construct them, ship them over and put them up to help in this kind of project. Being rural, we do not have the opportunity to serve, as you say, the day centers for the large populus of people that are in highly urban settings, and possibly tomorrow's speaker will have some of those things that he can bring to you.

Question: Mr. Willows of Missouri is particularly interested in the Foods program at Alfred - is interested in the placement, the salaries; is there a particular office to take care of placement of these students?

We've had a good question here and I hope I hit every point. First of all, yea, we feed the troops! In fact, we aren't large enough in our total school yet to be able to really do this efficiently but we feel that we need to do this to give them the everyday kind of practical experience of being on the job. We put on about 33-40 banquets during the year. We do all the things that are probably done in a vocational training program for food service people. For example, we don't train just a baker, or just a chef; we try to cover most of the skills that are germane to the food service industry, because we found there were so many openings in New York State that we want the person well-prepared to enter more than just one line in case that line isn't open when he graduates. What kind of operations do they go into? One of our largest is in hospital feeding and institutional feeding plants, school cafeterias, hospitals, particularly for the women. The men are moving into excellent programs in your larger hotels in feeding establishment. Some of them actually going into maitre d' work and things of this nature, so the placement is good. The average starting salary this year for food service kids, boys and girls, was $102 a week - that was the average salary. The higher elevation for the boys who went into commercial foods with restaurants, the lower ones with those who went into school lunch programs and hospitals. Did I hit them all? We charged the student 99 cents for the one main meal - he gets a well-rounded meal.

Question: Mr. Simmons of Missouri. Would you elaborate a little more on the selection process for admissions since you are not particularly interested in the high school transcript.

Yes, first of all, I tried to get away from this highly competitive idea of letting kids into school based on what they had done in high school. I let the pendulum swing way the other way. You know, how they will say the pendulum will swing one way then will swing - boy, with me it had gotten way over the other side. And so I said, "I don't want to even look at a high school transcript - all I want to know is that he graduated from high school and that he was recommended by somebody", and it's still the way I feel. Now, as I developed I was able to get a vocational counselor who also handles our placement at the present time - he has to wear two hats 'cause we don't have a lot of finances and this was the question of the previous man. Now, this vocational counselor is telling me that as he watches students in programs that there are some that might have been better suited to another program, although they are being successful in the program and they are graduating. Perhaps, if they had been tested for appitude, their appitudes might have been in a different field. We are getting some of this where they started in a program and through counseling transfer into one that they feel they will be successful in. What we are saying is that we are losing a little time here - we're losing a little water, so he said, "Would you object to my trying to get to some predictive materials to help us and guide us in future years to select students for these programs

based on testing materials?" Well, I thought being against it would be like being against motherhood, so I said, "Go ahead", and so he is using a few of these basic tests like the - and he said, "Maybe, these aren't the ones, maybe, I'm going to be working on this for 15 years, I don't know", but he started with Minnesota inventories, Strong, paper-form boards, personality factor tests, etc. He's using these materials with the idea it's an after the fact thing - we aren't using it yet for acceptance. Hopefully, what we'll be able to do is to say, "Look it, a student that wants to come to the vocational division will automatically have him take a few of these tests to help us if he says that he wants to get into automotive" - we can look at it, not in terms of his high school record but say, "These tests indicate that you'd probably be better suited possibly in another program", and then talk to him. If he doesn't agree, than all right. Or, if a person gets into a program and is not being successful, we might turn to these and get a reason why he's not. I still want to take them, if they want to come.

Question: Mr. Spencer of Vermont. The question is--what might be the problem of tying in post-secondary vocational program with the area vocational program with the area vocational center at the secondary level?

I'm really not a judge of this - but I have asked students this - this very question. Because there was thought, at one time, maybe, the place to do the job that we were trying to do at Alfred was in the occupational centers of the high schools. So, I made it a point from my survey to find out and the thing I have found out is this - that Mrs. Jones lives on 426 Stone Street and Mrs. Smith lives at 428, and Mrs. Smith is sending John Smith to Cornell next week but Mrs. Jones is sending Johnny Jones back to high school. He likes the feeling that he is going on - he's reached the level of education - he's 18, 19, 20 years old now - he would like the idea that I'm not going back to high school, I'm going on. Now, this may be a completely unjustified, false sense of dignity but how do you lick it? He likes the idea that I'm on, and so does the Mother and Father that we've put our child through secondary school system, now he's ready to go on, and I can give that student that sense of dignity, and that is the one thing that our central office insisted on, that if these kids come to Wellsville, darn it, there's no difference than any other college student on that campus, and boy, the minute they are, you'll close your doors. This is the word I got from somebody, whether it's right or not, and so they sit on the student council, they're in the drama productions, three of the first-string basketball players were from the vocational division, they're in the band, they're in the chorus - the whole works. So you've got to have a program to tell the players apart. So, to answer your question and I don't want to stand in judgement of it but this is what the students say, "I want to go on".

Question: Mr. Dougherty of New York - the question relates to the development of vocational faculty. Are you urged to get into the professional development- if this is the case, what are the problems in connection with calendar, particularly if they are hired on a full year basis. Is this the essence of it, Ed?

First of all, all but two of the twenty-three faculty in the vocational division are presently enrolled in a program working towards permanent certification in a baccalaureate degree. All but two - these two, where are they? One, on the recommendation of his department is in industry picking up a new segment of the industry that they want to teach, and the other one, this year, is taking a specialized course in his field to come back and relate it more. I don't consider this teacher-education, taking it within his field. What programs are they in? They are in a program operated by Oswego which you may be very familiar with. I'm proud of this fact. I did not push them on this. I counseled them as you said and told them they were available but I did not push them because I wasn't sure whether I was being right in pushing them, but they are so enrolled. Nine of them are at Oswego this summer in the summer program. Now, in addition to this, President Huntington has felt fit to hire a teaching consultant that serves at the college, Dr. Joseph Seidlin who was formerly the Dean of the Graduate School at Alfred and a very well-known educator and a very fine gentleman and teacher. This man serves on the campus all year long in terms of advising faculty, if they so want advice - meeting with faculty in terms of improvement of program both vocational and technical. Now, our faculty have asked Joseph Seidlin to meet with them once a week on Tuesday, and I'm not allowed in. The door is closed right in my face, and the reason is that they want to be able to let down their hair and talk about the real "nitty-gritty" problems they're having without being embarrassed. And so we do have this program and it works swell -- it works just swell!

Question: Mr. Purkey from Ohio. What is the relationship of the Unions to the apprenticeship program and the apprenticeship program with your vocational-ed students?

I think it varies a little bit with the Unions - I haven't tried to push any power plays. Three of our men on the - in fact, the man that heads it up - our construction technology is secretary to Journeyman's Union in western New York in the construction trades. Better than 50% of our graduates this past June selected to go with the Unions and were placed with them - in terms of the journeyman, carpentry union, jointers. We have only had three get into the electricians union - and all three of them were by examination, but I found out that we only had three that tried.

I don't think we would push in there. I think these are real problems but we had three that got in - one of them went into New York City into a big local - I'm not afraid of the, I'm not going to try to push my way. We've got a good thing, and if they want them, they can have them, and if they don't, I'm sure they are not going to be out of work.

Question: Dean Hoffman of Delhi Tech. Question is - how do the costs to the vocational student - how are the costs mitigated to the vocational student by Federal funding?

Clarke, I'm going to be more than honest with you and say that it was the second year of my operation that I knew a student had to be a high school graduate before he could get these things. In all absolute honesty, now, I'm sure Dean Wurz knew this, Herm Sicker knew this but in all honesty, I didn't know until then. In work-study, we kinda' got forgotten - that was one place we did get forgotten - we had eleven in work-study. This picture has changed considerably but the problem was we didn't have the funds proportionately divided by division. There are quite a few that have applied for Federal loans - we have a lot of them that are working their way through. To be absolutely truthful with you, the reason that I actually set this high school graduation is that I did not want to be subject to the fact of knowing some kid left high school to come with me. I want them first - a lot of people may criticize me for what I'm doing - we don't have a lot of general education but I can say, "Look as far as the student is concerned, he's met the minimum general education of requirements that the State of New York has set up." Now, in all honesty, I feel that I can give him the trade occupation, so, in honesty, that's the answer.

Question: Are there courses that the vocational student takes, such as work attitudes, general studies - that kind of thing?

Yes, there are but they are not taught the way the book says. Therefore, I'm a little bit hesitant in telling you about it - but I will. There are certain threads that we feel are important to those kinds of people. One is human relations from the standpoint of what are the responsibilities of the employer to the worker - employer-employee relationships. No matter what curriculum they are in, this is important. Number two, the next thing that we find is very important is the commitment to work habits. You know in a lot of colleges you cannot penalize the person because they are absent as long as they pass their work - these kids are graded every day. If they are not there, mister, they can fail because of absence and if they are tardy too often - these men have sat down with these people before they ever started classes and said, "Look it, when you get out on the job and that's what we are training you for - you've got to be on time - now, you'd better be on time here and if you aren't, if it gets prohibitive, we are

going to treat you like you were on the job and let you go", and they do. The first thing the draftsmen do when the men come in, and these are core things that we work through in many of these, I'm using drafting as an illustration - when the freshmen file in, there are four boxes - one at the head of each stairs and the first thing that they do is shine their shoes. That's how they start, and then they load them in a bus and take them over to Preheater & Worthington and take them to the drafting rooms and of course, it's all set up - they know we are coming and the lead draftsman brings them in and he says, "What's the first thing you notice - it's atmosphere and it's dress because if a man is sloppy, he is going to carry over in his work just as he is and therefore, we have a code of dress here and that's what we require them to wear". So, we bring these kinds of things in - this is a shirt and tie operation in drafting. But they are given the reasons why it's a shirt and tie - they don't just say you've got to wear a shirt and tie - the reasons are this and it's told to them by an industrialist. In terms of placement when they get to be seniors, we bring in employment representatives and video tapes of employers discussing, like Ted Stebbins from Kodak, who says, "When we interview students these are the kinds of things we look for and the way we expect them to behave, etc.". These are core things but notice they are pragmatic as the devil. They are all in relation to this boy bettering himself in relations with his employer and getting a job, but that's about the limit of it and it's done departmentally. We do have several seminars that are open to students during the year that they come to where we bring in outside men on insurance, health, social security, income tax. In electrical we bring in faculty from the Main Campus. We bring in a business teacher into the electrical department to teach these boys business principles and credit simply because a lot of these boys are going into business for themselves, in their own little TV shops or repair and they've got to know about credit and not letting out too much credit - these are core things that are done but these are all - they are pragmatic.

Question: I think one of the unusual features of the program is the manner in which you determine when and how they complete their requirements. Would you tell how you decide how the student has completed the requirements? How you treat him at time of graduation?

When a man is ready, we want to put him on a job - we don't want him treading water. My concept was we don't teach courses, we teach students. When a student is ready, whether he's had this course or not - that isn't important - he may get some of this out on the job, so when a draftsman or a mechanic or carpenter is ready, then the vocational counselor, acting as a placement officer, begins to find out where the opportunities are and informs the employer that we have men that are ready. But we do it on this basis - that we let the boy go under only one condition - that we are allowed to visit

him on the job, see what quality work he is doing now that he's out on the job and the employer bi-weekly, every two weeks, sends in a report according to certain things we ask for, such as attendance, attitude, quality of work, relationships with other employees and so on. If we see it when we visit him that he is doing quality work, if his reports are good from the employer at the end of this work block period, then he will get his certificate. If, as we see it, he is not doing his job, he is tardy, he is lazy, and is not living up to quality work that he did in the school, then he doesn't get a certificate and the only way he can is to come back and finish that quarter under our tutelage because we have been wrong - he has not meet his requirements. So far we have been very well pleased with our results. Normally our work starts in the last quarter - very seldom do we let anyone out much before that, except of course, where we graduate them completely at the end of four quarters, when they are really "hot cookies".

(Does the student pay tuition for this period?) - No, he does not.

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

A Presentation by David Ponitz, President
Washtenaw Community College, Ann Arbor, Michigan

We are here today to talk about what I think are some of the very exciting ideas and opportunities in occupational education. And as we look for ideas which have merit, I would first like to suggest some broad brush approaches to the type of pressures and forces which, whether we like it or not, we are asked to face. We must face these pressures if we are going to solve some of the questions of occupational education.

I think we could all agree as we have fun with some words that it's a day of the economically enriched, and the culturally deprived, of human relations and technological advancements, or compensatory education and after school pay, of collective bargaining and independent thinking, of space capsules and birth control pills. It's a day of school drop-out and atomic fall-out, of advanced placement and automated displacement, of teacher fair employment and youth unemployment, of children of the flowers and student power. It is a day of racial balance and budgetary imbalance, of college explosions and society drop-outs, of urban renewal and suburban accrual, of man's civil rights and a child's educational rights, of white inability and black futility, and certainly a day when occupational educators are on the spot. While men around us are in orbit, going to the moon, and walking on the moon, we are on the spot here on earth. Now, why, precisely, are we on the spot? Why, precisely, are we dealing with questions that are specifically more important or seem more important and seem more pressing than they were five or ten years ago? I think, in general terms first, we can say that we are dealing with a society which is characterized by the speed of progress, by the diversity of progress, and by the challenge of progress. In the computer field, alone, in the last decade computers have become ten times smaller, a hundred times faster, and a thousand times less expensive for the information they can produce. This, along with many other technological advancements has major implications for us, but there are other implications which perhaps we have lost sight of in terms of looking at the questions. In 1910 of the students in the ages 14-17, high school age

students, less than 60 per cent were in high school. In 1930, that figure had moved to 73 per cent across the nation, and now we are working with figures at about 95 per cent. Schools have become responsible for providing for all students, not just some students, not just the "academically gifted" students. The latest projections for those of us in college work are frightening. They suggest that elementary school enrollment probably will begin tapering off by the late 1970's. High schools will reach their peak by 1977, but colleges will continue to grow by massive proportions. There are about 6,800,000 people in college at the moment. By 1986 this figure will move to 11,200,000, an increase of 4,400,000 people. The key here is not just the numbers game as I would see it.

The key is an aspirations game. Not only will there be more people, but the percentage of people moving on to college will increase because the aspirations of people will continue to grow. Note, for example, the statement two years ago by the Educational Policies Commission which suggested that 80 per cent of all high school graduates could profit from some type of post-high school education. This suggests a massive problem which we must face if we're to meet the needs of students during the coming years. Community colleges and those with community-college-type programs will take the massive number of these students, and I would predict that in those states with comprehensive community colleges throughout the state that upwards of 75 per cent of all students starting college for the first time will start in community colleges. This suggests a new approach, as I would see it, to occupational education -- indeed, to the two year college, or the college that has two year type programs in it.

In terms of what we must be ready to prepare students for, we haven't seen anything yet. How do you prepare students for occupations that don't exist? It may prove helpful to look a bit at the future as we train people for the year 2000 -- what sort of things are going to be happening? The futurist would suggest that ballistic missiles will be common for transportation and that the five-hour trip from Kennedy to Delhi will be reduced to 26 minutes; that hereditary defects which now fill our special education classrooms may become things of the past and be controlled. Facsimile newspapers will be printed directly in your home; biochemical techniques will aid in the growth of new limbs; and the brain computer which is now only being talked about may very well enable man to enlarge his intellectual capabilities. We will just hook into a computer and know the answers much sooner than we do now. That these things are happening suggests that occupational education must have some real pizzaz; that we need to develop some radical innovations, some massive bold thinking, if we are going to meet the needs of the students.

We have talked about speed and diversity of progress. We have talked about the growth of student enrollments, about the futurists' approach to what is going to happen to some of

the students presently in school -- what are the implications? I would suggest several. I think first that we are coming to the point where we are no longer taking the human mind, opening it up, pouring in the education, putting the cork in, and saying, "My friend, you are now ready for your next 40 years of work".

The key will be intermittent education. It suggests that continuing education, the adult education programs, will become a massive part of any college or school doing its job. Let's remember that as of 1950 the percentage of people involved in manufacturing began to decline. We are no longer in a needs economy, or a manufacturing economy; we are in an aspirational economy. An aspirational economy suggests that we are beginning to train people to help make the world more tolerable. As the world is made more tolerable, new jobs take shape. We are talking about chefs' training programs, about law enforcement, about recreational aides, about a whole host of programs that make the world a better place to live. The number of environmental technologists in air pollution and water pollution will grow immensely.

No longer will occupational educators be training people for jobs only. A new dimension has been added. The federal and state governments look upon occupational education as one of the social innovations to meet the needs of people whose needs have not been met in the years past. And this suggests, I suspect, for every man in this room, including myself, a very substantial amount of re-training and re-thinking in terms of what responsibilities we have, not only in training people for jobs, but fitting those jobs into a new social pattern and a new social force.

My suggestion to you is that we don't have the choice of being involved in some of the phenomena which occupational education suggests. It further suggests to me that greatness has been thrust upon American education, and that this group and others have been asked to solve many of the nation's domestic problems. As someone once said, "Those of us in education are now being asked to solve problems which several generations ago we just prayed about".

Let me tell you a little bit about Washtenaw Community College. It's an institution which is finishing its third year. It has 4,000 students, 60 per cent of those students are in occupational education. The college has 40 programs with 70 different skill areas in health science, business and industrial management, hospitality and community services, technical and industrial programs, trade related instruction, employees-in-training. We anticipate building three campuses with a total enrollment of approximately 20,000.

I speak today as a generalist. Probably the person who is facing you today knows less about occupational education than any person in this room. I am trained as a political

scientist. I am trained as a generalist. I am trained as a person whose responsibility to an organization is to solve problems at the generalist's point of view rather than the specialist's point of view. My hope then is that as a generalist looks at questions that need to be solved, that perhaps we can begin some dialogue, and see what are the areas of agreement and what are the areas of disagreement.

One item before we move into some of the things that we should discuss, and that is, what can we say about the community college student? Twenty per cent of the parents of students presently in community colleges across the country have only a grade school education. The great majority of community college people are first generation college students who have not had the benefit of responses or feelings of what do you do when you go to college--what's college all about? About a third of the enrollees will need some type of developmental or remedial work. For those community colleges, such as our own, that are doing massive recruiting programs for those at the under-achiever level, that figure is even higher. I think this is something that we must recognize and I accept proudly that the community college is taking that responsibility. In most states high school graduates decide to go to community colleges not for the traditional reasons such as reputation, curricular offerings, prevailing institutional atmosphere. I think we should recognize that many go because of the low cost; it's close to home, and it's an opportunity for employment. This suggests that the motivational patterns and forces of students who come to community colleges may be quite different from students who go to colleges of national reputation.

Because of this type of response of community colleges, it seems to me that the community college, then, has a particular responsibility as to what its role and function should be. The first thing that it does is to draw upon history, conditions, problems, assets and liabilities of the community which it serves. It must ask one basic question. How can the college best serve business, industry, individual citizens, and cultural interests of all the people? It must have a comprehensiveness to deal with people of all skills, all ages, all interests, all capabilities. Now that's a big order. Some of us would like to think that the role and function of a community college is to deal with at least the top 100 per cent of the high school graduates. Now I say at least the top 100 per cent of the high school graduates because when I graduated from high school the only thing I remember from the commencement address is that "you are among an elite group" -- only 50 or 60 per cent of those who started graduated. The other 40 per cent still need intermittent training if they are going to keep a job or if they are going to get a job. The community college or some other group with that function must meet those particular needs if we are to meet the needs of people. For this reason, it seems to me, that we need to find new approaches and new techniques to meet

the needs of those particular persons. The fact that a community college is based upon community needs suggests that there may be substantial differences between community colleges. It's not an extension of the high school. It's not a four-year university. Although, let's recognize the fact that there are some in community colleges who would dearly love to run the institution like a four-year university, and who would dearly love to have only the top 10 per cent of the qualified high school graduates in that institution. This is conflict which we should recognize.

It seems to me what we need to do is to develop what organizational patterns the community college should have to meet the needs of people. To me an open-door policy suggests several things. Open-door is quite different from revolving door. Too many community colleges look upon their function as simply allowing the person in, giving him the opportunity to flunk, and suggest they have fulfilled their commitment to people. It is essential that counseling techniques be devised with the open-door policy, but it is likewise essential, as I would see it, that a community college or an institution of this type meet some specific levels of training. Let's talk about those levels of education or training for a moment.

It is hard to understand, it is hard to get the feeling, that there are some people in our society who know nothing about the skills or the attitudes of work. It is hard to understand that in our urban society there are families in which no one in the family has worked as you and I know it for three generations. For this reason some educational responsibility is necessary to develop the attitudes of work. How do you get to work on time? How do you transfer on a bus? How do you sign a check? How do you handle your money? All of these things are most important. I come from a state in which industry has taken a massive approach. Let me tell you a couple stories about some of the problems the automotive industry encountered in hiring hard-core people who have never worked before in their lives. I am referring to research done at the Chrysler Corporation and the Ford Motor Company. The drop-out rate was phenomenal during the first several months. They couldn't figure out why until they began looking closer at the people, and they found the answer. They found out that essentially none of the group had alarm clocks. Why do you need an alarm clock? If you aren't working, you go to bed when the action is over. You get up when you feel like it. There is no need to get up at 6:30 or 7:00. Once they provided people with alarm clocks, once they showed them how to transfer on a bus, and many in the Four City Detroit area had never actually moved that far from their own area, and didn't know how to get around outside their own area. Now the reports are that the percentages of attendance and the percentages of retention are about the same as "a normal factory worker", which incidentally isn't very good.

One of the functions, then, it seems to me, is to develop

a layering of the attitudes of work. At Washtenaw Community College we do have a program to develop the attitudes of work. We actually pay people to go to school. We pay them $1.60 an hour as they develop the attitudes of work. We also guarantee them a job. When they finish the attitudes of work, they move out into a job. They key then may very well be to move on to the next level, and the next level may be learning a particular skill or a particular function. It may be developmental work in learning to read, learning to write, learning to do mathematics, but at least starting to find the next step up. About 40 per cent of our student body fall in this area of taking at least one developmental course. In a community which has one of the highest family incomes of any in the nation, this may seem strange. Except to say that we have a very bimodal community -- the very affluent educated person, and those who need the type of help we are talking about.

The remedial developmental work is such that in our own institution we have math labs, language labs, reading labs, etc. In our math lab we have instructors whose responsibility is to take a person where he is, be it third grade level, and let him move as fast as he can on up through college calculus. Some students come in for developmental work of this kind. Some come in because they are taking advanced chemistry and are having a hard time understanding the math in advanced chemistry and need particular help in this area. It is a very flexible type of program, and does not have the stigma of many remedial type programs.

The third and fourth areas, which are functions of a community college are the occupational areas and the general studies areas. I would say just one thing about the occupational area. It seems to me community colleges make the same mistakes that some of the great universities make. They make the mistake that they are doing our job if they provide technical education - they provide the skills of abstraction. It seems to me that we need to develop the techniques and approaches in occupational education of dealing with the full sprectrum of courses--from that person who has the God-given skill to deal in a skill of manipulation, automotive body repair, to that person who is going to move into the skill of abstraction, to the engineering technician type skill. This is extremely important.

General studies programs have been pretty well defined, and we need not spend too mucn time on them. But the four-level program perhaps makes good sense. The attitudes of work, remedial developmental type areas, the occupational and general studies type programs. These are the functions of a truly comprehensive community college as I would see it.

These programs don't just happen. They are made to happen. I would suggest to you that some of these things are upstream items which are difficult items, and I think I can guarantee you this -- that unless groups like this push, and

push hard, for these types of programs, they are going to fail. This is not to say that if we push and push hard, we are going to succeed; it does say, for sure, that unless we accept this as our goals, our role, our function, these types of programs for many people will fail and fail miserably.

There are some questions which I have had to deal with -- you have had to deal with. The first question I would like to pose is - How does the college overcome the second-class citizenship of occupational students? You hear often at the high school level, "You know, my course is just a dumping ground". I think maybe we have some psychological responsibilities among ourselves to suggest that occupational education is not a dumping ground but an opportunity ground. Five high school principals from Detroit were asked to select five people that under no conditions could be accepted to a major university. They didn't have the grades, they didn't have the college board scores, they didn't have all the accouterments of going to this university. They weren't able to find 25, they found 22. The university said it would provide this 22 their full way through scholarships, workships and loans. This was done. Of the 22 people that by our white, middle-class testing patterns could not succeed, 17 finished their junior year. They had the same types of problems as any other college freshman, but they finished their junior year, and last year the same percentage of that group graduated from this institution as the normal indigent type of student. What was the key for people who couldn't succeed? The only thing different that was done with these individuals was that they were given counseling on a one-to-one basis weekly with an adult model who had a particular interest in them and in the types of programs with which they were involved. This suggests to me that we had better become very concerned about what we are doing with testing. Very concerned about the types of attitudes and the types of barriers which we place in front of people whom we say can't succeed. Particularly when at each of our institutions we find person after person who by all the traditional means cannot succeed, who does succeed, it suggests to me that we need to find ways, opportunities, and attitudes to deal with this broad sprectum of person.

Now, you wonder maybe this worked in just one university. You can replicate this particular pattern at many of the major universities in the country, and those of us who are dealing in occupational education or community college education can also replicate this pattern day in and day out at every graduation we hold. Persons can't succeed, who indeed succeed, and become contributing citizens. I say to you that we have a whale of a lot of work to do with total faculties across this country if we are to re-inforce this particular concept about the merit of people irrespective of where they may be in this occupational or general studies sprectum.

Washtenaw Community College has had some interesting experiences in this area. I mentioned the top 100 per cent

of the high school graduates. We have a number of ADC mothers who presently attend the college. Some of them have only a sixth grade education. We aren't trying to make Ph.D's out of them, although one of them has as her goal to be a psychiatrist. We do have some interesting aspirational levels of some, but the key is to offer options. For this particular group, we have a full-time nursery. While they are on campus, the college takes care of their children. We also use this particular laboratory for our psychology people in child growth and development and for training educational technicians. It works out very well in a beautiful symbiotic relationship. The key is that it offers people an opportunity to move off relief. It offers them an opportunity to move on to a job. You wonder, what about the community? Will they accept this concept? The liberals accept it automatically, but the conservatives also accept it. In your community you can make a good point if you say to a person, "Look, my friend, by spending $700 now, we predict that in three years this particular person is going to be off relief." Business, industry and the conservatives in the community, in my opinion and in my experience, will buy this program, will find it one of particular interest and will back it.

We have one program now in the skills and attitudes of work which is supported 100 per cent by industry, saying that, "Yes, we very, very much want to show our particular response to helping people get off relief The fact that a great number of industries support it, suggests that here's a real opportunity to help an individual pull himself up by his bootstraps.

We also must consider the role identity of students in the occupational areas behind the boiler room. I would suggest to you that in terms of the role identity of students, we need to go one step further. I am not interested in having the technical industrial building just simply being a part of the complex. I am more interested in having the total functions of occupational education in each building so that you can't walk through any building and say, "this is only a technical-industrial facility; this is only a liberal arts facility." I see no reason why electronics and physics can't be combined. I see no reason why health occupations and the exact sciences can't be combined. Why not combine some of the technical commercial art, the construction technology and the fine arts in the same building? They are the same skills. Why not put areas together where the skills are involved and similar? Why shouldn't mathematics and industrial drafting be together? The types of buildings and the types of programs will do much, not only in terms of role identity, as I would see it, but in two other factors. We come back to the point of the merit of each individual, and we also come back to the point that a great number of community college students have no idea of what they want to do. They fall into the category of the "I don't know." What do you want to do? I don't know. What are you interested in? I don't know. This type of student

needs opportunities, sample the opportunities of occupational education. It can be in the occupational areas where the architectural draftsman may go over to technical commercial art and see some areas here. It might very well be the person who is taking a general studies program with no idea of where he is going who happens to wander into a lab and becomes fascinated with a piece of equipment and begins talking about it. I have seen many, many opportunities for students, some of which they have taken to and indeed have done just that. Transferred over, if you will, to some program which becomes more meaningful. The sprinkle system, as I call it, of putting programs of occupational and general studies in the same building does much to facilitate this particular opportunity.

I would suggest to you that as teachers are a pretty clannish bunch, and the clannish bunch has done much to alienate teachers from one another. Not only do we need to mix students, but it seems to me that we need to mix faculty. I would be the first to say that on our particular campus some faculty perhaps aren't overly happy with the mix. We have no divisional headquarters. Faculty members are arbitrarily placed in office space, nine to a general area, and it is not uncommon to have the tool and die specialist sharing an office with a poultry specialist, an accountant, an X-ray technician instructor, and an historian. We found some interesting biplay on this one. We had a rather long trade-related instrution bulletin written a short time ago, and the two people who worked on it happened to be sharing the same general area. One person was the technical specialist; the other person was the historian who was very facile with the words -- when he was told the information he could write it very quickly. Who would ever think of a trade-related instruction journal written by two such diverse groups as this. The writers learned a good deal from each other. We have done this arbitrarily with one exception. The first year we found that there was one instructor in electronics who was very anti-English composition and very vocal about it. We also found that there was an English instructor--a girl--who was very vocal and very anti-occupational education, particularly in the electricity-electronics area. We put them in the same office. They learned a good deal from one another and both attitudes changed perceptibly during that first year as they had an opportunity to talk about some of the exciting things which both were doing.

I think, perhaps, we should also move from the second-class citizenship through some new approaches to education. I would draw to your attention a recent study done by the Boy Scouts of America by the Institute of Social Research, at the University of Michigan, which talked about what types of education were meaningful to young people, and the response was that young people are willing to relate to adults and assume adult responsibilities outside the home, but not on traditional terms. The traditional term being what we call a vertical approach -- I am the master; sit at my feet and learn.

Too many classrooms take this approach versus what we call a horizontal educational approach. The horizontal approach is used much more in occupational education and maybe results in part of your success. My function as a coach is to help you do those things which you feel are important and to do them well. In the horizontal approach of my job, I counsel you at the brake-shoe -- not in the office; work with you in terms of a skill which you want and a skill which we have defined together, recognizing once again the teacher-student relationship. The response of the student is much greater. A further response is noticed as you go into an occupational laboratory. If you ask the faculty member, "How is the class doing? How is Sam doing?" - he will tell you instantly. He knows how each student is doing - which is not so in the general studies area. This does suggest some better approaches to learning which occupational education has and is farther down the road in terms of success than the traditional liberal arts program.

Question number 2 - How is occupational education given visibility to the public and faculty? Too often we give lip service to the fact that we are really going to stress occupational education. I would suggest to you that one of the outstanding experts in occupational education in this country has said, "Leave the decision to a total faculty in a comprehensive institution, and within three years you won't have any more occupational programs". This is pretty frightening.

Part of our concern is that we need to find something more than those types of programs to tide us over. What we need to publicly state is that occupational education is mighty important. It seems to me that too often the person in charge of occupational education is in a third or fourth echelon position, and by and large he must report to someone who is an expert in Greek, or is a political scientist who doesn't really know or understand vocational education. One of the first things you need to do is to make sure that the person who is in charge of occupational education is in a top-line echelon position with the ear of the chief administrator of the board. If it's not done this way, I foresee major problems in terms of having programs shunted aside by people who don't understand. As a corollary of this it is very helpful to have other people on the top staff who understand occupational education. In our own college we have been very fortunate in that the dean of general studies or liberal arts happens to have a good deal of engineering. It is very helpful when the dean of business, or the business manager, also happens to be a tool and die journeyman. He understands the language. He understnds the lingo, and this is extremely helpful and useful. I would also suggest that if you are going to have occupational programs in a new institution, you must set some arbitrary goals immediately. This sounds very undemocratic, but as I would see it, unless you establish some pretty arbitrary goals that you are going to have a minimum of 40 per cent in occupational programs, you are never going to achieve this goal.

The easiest budget you have worked on it the first-year budget of a first-year college. It is like playing Santa Claus. The budgets get tougher and tougher and tougher. As they get tougher and tougher and tougher, it makes it very, very difficult to spend $50,000 for a numerical controlled horizontal milling machine. It makes it very, very difficult to put in data processing. It makes it very difficult to move into an expensive nursing program. Not only must the goals be arbitrary but some of the responses must be to move very specifically in some of the more expensive programs during the first or second years, or to earmark funds for that purpose. In this way you move out quickly and begin to set the style of what your institution is all about. Many institutions that I have seen apparently have a real interest in occupational education for about three years. Then, as budgets begin to get tight, and as we see that the occupational classes are smaller because it is hard to recruit people into those programs, we begin to phase down and say, "Let's go with the programs where we know we have the students". We have to serve students and we begin to phase out some of these areas. This presents major difficulties if we haven't moved in an arbitrary and very specific fashion very early in the game.

Question number 3 -- How can the college serve all students with skills of abstraction and manipulation?

I mentioned before that I am very concerned about those institutions even at the community college level that take the approach that perhaps we are dealing with the top 50 per cent of the high school graduates, and hopefully next year it will be top 40 per cent. It seems to me that the approach of the community college is always to deal with the very broadest of student abilities. How do we help the student? You and I arrived at the particular point where we are by pursuing the puritan ethic--work hard, save your money, live a clean life, and ten years from now you will have a job that will amount to something. The generation with which we are now working is not a puritan ethic generation. It is not a deferred-gratification generation. It is a "now" generation. Since it is a "now" generation it suggests that programs and curricula need to be so developed to allow for this "now" thinking--two years is an eternity, one year is a whale of a long time. We need a continuum curriculum to allow for all types of skills, then on top of that we need a modular curriculum. We allow a person options. Would you want to take a program for a certificate in six months? Great. Take it. If the person has had some success in this program, then he has an option. He can go out and get a job at a certain level, or move on to the next option. He may move on to the second year, into the options here; but at each time he has an option to move out or to move on for additional training. Because these options are available, we find that many students start with a six months' or a year's option and then continue on to finish the Associate degree. If you had only the Associate degree as an option to begin with, I suspect that there are many who would not try it at all. They need success, they

need an opportunity for success, and for many who come to the community college success as you and I know it has not been there. Only with considerable amounts of counseling and considerable amounts of feeling for various types of programs, are they able to find lasting success.

I would stress that the quality of the faculty member is one which must be determined very carefully. Just as North Carolina has no certification requirements, Michigan also has none, and I say, "Thank goodness". On our particular staff we have people who are teaching with zero years of college education up to Ph.D. level. In our area people with zero years of college education are a lot tougher to get than the Ph.D.'s. It means that in terms of paying people you need a much different method than years of teaching experience or the years of traditional college training. You need to plug in industrial experience, journeymen's cards, special trade school experience -- all of these items, if you are going to find the types if persons with the types of industrial experience and the types of interest in students that you must have to meet the special instructional needs. These salary structive items are extremely important if occupational education is to succeed. If you are going to move on the traditional pattern that you move up on the salary scale as a result of a master's degree, or a master's plus 30 semester hours plus teaching experience, you may not be able to attract the occupational people you need. You are going to have a very difficult time finding the types and quality of industrial instructors that you want. The key is to find people who are moving to a particular teaching responsibility from a variety of backgrounds -- from the traditional, from industrial experience, or from early retirement from a business. All of these experiences are needed for a comprehensive community college.

Question number 4 -- How can the college meet the needs of groups needing special help and encouragement -- with particular emphasis of the black student?

Carl Stokes, Mayor of Cleveland, has asked the question, "For whom it it more difficult in this era of Black-White confrontation, the black or the white?

The problem of understanding black and white are extremely difficult problems which must be faced. We must recognize our particular function of dealing with black America. I would like to take you back to some of the research done by Pat Moynihan, who at that time was Director of the Center for Urban Studies at MIT and Harvard, who is now a presidential advisor. The 1960 census indicates the number of black males enumerated was far less than anticipated. There was a much higher loss in the young black than in the older black. They had simply dropped our of society because the opportunities they sought simply were not there.

Moynihan talked about the underclass. The person who was

not given an opportunity. As we look at our urban areas in the last year we know that income in the United States has gone up 11 per cent. We also know that in those same areas income in the black areas has gone down some 20 per cent. This present major difficulties. We like to say that only 4 per cent is a normal figure for unemployment in the United States, but this is a very differential figure in terms of employment. For the engineer, that unemployment is about 1.3 per cent. Non-existent on statistical terms. For the black man, it is 15 per cent - for the black woman, 30 per cent. Two years ago, a national study was done which suggested that on economic terms a black student might better drop out of school at the eighth grade rather than continue on to one year of college, because the amount of dollars would be no different between dropping out at eighth grade of intermediate school versus one year of college. I am happy to say that that has changed somewhat. It has changed in several ways for those persons who go on for two years of post high-school education, there has been an exponential, a substantial exponential of their salaries. Not equal to whites, incidentally, but it has moved up very rapidly. For those who have four years of college it is now a buyer's market for blacks, and there are many areas where blacks may command higher salaries than whites. But the point I make is that we must respond to this particular question. We haven't responded very well. I would draw to your attention a book called, "One Year Later", which is a response to the Kerner Report, and to what happened in that year, as I read the book, it says that general response is not much. I think we can make the point in occupational education that there are specific problems that we deal with people as people and that we are not involved with black studies programs although I have some very strong feelings about black studies, am very much involved with black studies, very much involved in non-negotiable demands for flying the Afro-American flag, and a few other interesting demands. But it seems to me that part of our problem is to deal with attitudes.

I had a carpenter doing some work around the house He was black. We were both working Saturday afternoons, and I said, "Why don't you stay for lunch"? and he did. We chatted about what his problems were. In enlightened Michigan these were his problems. He went to work as a carpenter after waiting for two months to get his white temporary card to work in the state. When he got to the job, the first comment was, "Gee, man, you can't be a carpenter - you've got the wrong kind of hammer". "What do you mean, I've got the wrong kind of hammer"? "We only work with 20 oz. hammers on this job". "My hammer is a 20 oz. hammer". "If it is a 20 oz. hammer, there is something else wrong with it". "What else it wrong with it?" "We only work with 16-inch handles and your handle is only 12-inch". "You can't be a carpenter with a 12-inch handle". And the final comment that he received was, "I'm sorry, you don't swing that hammer like a carpenter". Now I ask you the question -- how does a carpenter swing a hammer? So long as the nail goes in the board, what difference does it make whether you swing it

between your legs, right-handed or left-handed or back-handed? But, his answer was, "I am sorry you can't work here because you don't swing that hammer like a carpenter".

This is the attitude which we find. May I say to you that as you train people to go to work in the mighty industrial complexes in this country that perhaps one of the most racist groups is the foremen. We have some pretty massive jobs to deal with attitude changes and development of attitudes by foremen, to work with all people, as we have with all white America. We can insulate and isolate ourselves from these questions, but in occupational education we have a major responsibility for seeing that all people move into the mainstream of economic life, and this is one of those things that must be accomplished to move people into the mainstream. It is this group right here whose attitude change needs to be accomplished if we are to achieve that particular goal. There are other things that need to be done for the black student as I would see it. I think we need massive recruiting efforts for the black student. There are problems in occupational education because the black student says, "I have served 400 years. I am not going to serve any more". Part of this is understanding what service is all about. Using our own college as an example, the county has about 7½ per cent of black people, and in the college this year, the number of blacks ran between 18 and 20 per cent as a result of a direct recruiting effort with mobile counseling vans, and great amounts of financial aid. But with one other option which to me is perhaps the most vital option if we are going to deal with minority groups. That option is this. All people need models, and in my opinion, the black student particularly needs male adult models, and you cannot develop a good recruiting program for black students unless you provide that black adult model who can be there to help that student and understand that student's problems. I think that I understand the problem of the black intellectually. I think I will never understand the problem of the black emotionally. Herein lies the difference.

Here's an opportunity for me. Someone talks to me about it. If this person can make it as a black in the architectural area, then I can make it. These are the types of things, as I would see it, that are most important.

Question number 5 -- How can the college adequately counsel students?

I would simply say that the comments yesterday are very germane, that counseling in community colleges is pretty inadequate. Counseling in most areas is pretty "punk" especially in the occupational areas. It seems to me that the key is how to we develop differential counseling, so that we have not only the person who deals with vocational types of counseling, but psychological counseling -- whatever it might be. The other key is, what is the attitude of the faculty? It seems

to me that any community college worth its salt suggests that a faculty spends about a third of its time in the classroom, about a third of its time in preparation, and the other third of the time, in lieu of research which is a function of the four-year university, actively advising and counseling students and developing this model concept which we talked about. Going back to the story of the 22 once again. The 22 succeeded, or 17 of the 22 succeeded because someone took an interest in them. It seems to me that we need to find specific ways by which this can be done.

Question number 6 -- How can the college sell middle-manpower to the community?

In our area, 250,000 people - or 20 per cent of the census population are going to college and there are many who feel that you really don't amount to much unless you have a minimum of a four-year education. It seems to me that we need to find ways to help people understand the responses of what middle-manpower can be. I think we have that leverage point, and that leverage point is simply, "bucks". Talk about psychic income all you want, you can make a case as was made in a study at Cornell, that really there are only two areas, if you want to make more money where you should go to a four-year college - certain areas of engineering and certain areas of business. Other than that, forget it. You know this in your own areas of teaching, If you are in an industrial skill area, you can move out at much, much greater dollars than you are making in the school system. I have faculty members tell me this every day. Students whom they train for two years go out at equal or more dollars than faculty members are making with two years of instruction and greenhorns. I think this will begin to sell some of the concepts of occupational education and middle-manpower as being exciting programs and meritorious programs with which to be involved.

Now I am going to discuss something which to me has some exciting possibilities because if we are going to do some of these things which we have talked about, we need some new strategies of communication. The new strategies of communication are going to be very substantial strategies and ones which you can't do through informal means. I would like to talk about faculty negotiations and the response of faculty negotiations to occupational education as I see it. May I say that my premise when I start is that unless we do something rapidly, I see major problems for every fellow in this room in this particular area. I think it is no great secret that faculty discontent has recently become evident in institutions of higher education and particularly in community colleges. The Rehmus study, which some of you perhaps have read, has indicated that in the State of Michigan the average salary increase before formal collective negotiations was about 3½ per cent. Over the three years that Michigan has had collective negotiations, that figure has risen from 9 to 11 per cent. So the discontent and the venting of that discontent through confron-

tation and/or negotiation is a fact of life which must be faced and faced squarely. Twenty-two states in this fifty now have collective negotiations, and it is moving very, very rapidly. The State of New Jersey and New York have moved into faculty negotiations at four-year institutes, and you are going to see some rather "exciting" things happening in these areas.

I think you should recognize that my views perhaps are colored a bit by the fact that a year ago there were 116 strikes of public teachers across the face of this nation. Of these 116 strikes, 47, almost half, were in the State of Michigan. The reason for this disproportionate number of strikes in our state appears to be a very open-ended law based upon the National Labor Relations Act for industrial employees which is superimposed on public professional employees, and this causes what I call advocacy law. No one really knows what they are doing; no one really knows what the law is, and it really creates major types of questions.

When we talk about bargaining -- I will give you a quick five-minute lesson in bargaining -- it seems to me that we must remember that collective bargaining is an adversary role, faculty and administration are involved, and the exercise of power by either side. It is not to say that it is a role of hostility. It can be, but hopefully, it will not be. Collective bargaining is not 'you give and we take' but rather 'you give and take and we give and take' and there is a balance of power which is involved in negotiations. This requires an accommodation of conflicting views of two parties to adapt the peculiarities of their local employment relationship, and the agreement at which they arrive, which they agree to, probably will satisfy neither. But it's an agreement. I think we have to rid ourselves of the idea that collective negotiation is what is right will prevail. Collective bargaining is a simple exercise in pragmatism. It is a difficult process for the visionary, and extremely excruciating process for the dreamer. It is a process by which practical men face practical problems and arrive at practical solutions. The meaning of power is to coerce, and the only practical means to confront power effectively and basically is to decline to be coerced.

Let me make my point here in terms of this group. First, most boards and most faculties as they start are not very conversant with collective negotiations. This suggests to me the same type of turmoil and same lack of creativity in terms of dealing with some of the questions as happened in the industrial groups in the 1930's. The major problems ahead for occupational programs are these. Negotiators, as I see them, tend primarily to be liberal arts oriented. This is natural. Negotiations is a verbal game. It is a written game, and the fact that people that are liberal arts people, the historians, the English people, the mathematicians, if you will, tend to be oriented not toward what you and I are thinking about this morning, but toward somewhat different goals. The priorities

are quite different, and I say to you that as I look at the situation that some of the priorities which are talked about appear to be priorities which will substantially injure occupational education.

Let me make my point. On my desk is a group of demands, 160 pages long; among them, one calling for nine contact hours a week for each faculty member. It is difficult for me to see how one can teach an architectural drafting program in just nine contact hours a week. I am not sure that you learn about occupational programs by talking about them, but rather by the coaching techniques which we talked about a moment ago. Another priority requires every person to have a minimum of a master's degree to teach at the institution. There is a substantial failure to recognize that the tool and die journeyman route may be as difficult to obtain as a master's degree in political science. There is a failure to recognize industrial experience as it relates to teaching. There may be a failure to recognize the costs of occupational education, the equipment, the recruiting, the placement, the smaller classes--all of these factors--and may I say to you that if we are to keep the occupational responses in proper perspective, this group and others like this group must become much more aware of occupational training and its relation to negotiations than we have to date. I am concerned that two years ago in a speech to the California Community College group, Robert Maynard Hutchins made the comment, "Community colleges have more important things to do than to consider occupational education type courses". That doesn't surprise me. Robert Maynard Hutchins is Robert Maynard Hutchins. The things that surprises me in the transcript is -- applause? I think the uphill approach which occupational education has, suggests that we need to be ready to deal with this type of question at the pragmatic level, and very substantially at the pragmatic level. Let me close with a story which has made an impact upon me.

The story goes something like this. A Destiny appeared on a remote island one day and announced to three leaders of that island that disaster would strike the next day. The total island would be inundated by a tidal wave. By the end of the next day the island would be totally and permanently submerged. The voice of doom further indicated that escape from this impending disaster was impossible. "That's the problem, gentlemen, that we face". Three wise men gathered around and began to raise questions as to how they would face it. The first man was a devoutly religious man, with very traditional views, and he said, "I am going to gather my loved ones around me and together we will go to the sacred place and pray, and we will offer prayers and sacrifices to the gods in hope that through Divine Providence somehow we will be spared the devastation that has been predicted for us".

The second man, who was much more secular and epicurean in his approach, said, "There's nothing we can do about these

changes or events. I will summon all my friends together and we will go up and play poker and drink booze and hopefully we will be so blissfully immune to what happens tomorrow that we won't realize its impact".

The third man said, I, too, will pray and meditate like the first man, but I will immediately call together the wisest minds and the brightest people and we will begin at once a serious and intensive study of how to live under water".

Now, those of us in occupational education, I think, have those options before us. We can run the same time-honored approach of occupational education, the paths of traditionalism, which, I suggest to you, aren't going to work any more. We can look for the easy way and we can come to conferences and we can talk and we can go back and do the same thing and continue the same ineffective approaches to industrial education, or occupational education which we have had in time, or we can see the tough meaningful fulsome methods of living under water and trying to fully meet the needs of students. We have attempted to give you some of the underwater approaches and the tough approaches which hopefully will mean a more viable approach to occupational education and will better meet the needs of students that we choose to serve.

We invite your comments and your dialogue.

QUESTIONS AND ANSWERS

David Ponitz, President
Washtenaw Community College

QUESTION: What specific innovative techniques are being used at your institution? What are some examples of innovative teaching techniques?

I think I would preface the answers to your questions by saying the one thing that our institution has attempted to do is to determine specific needs of our community. We have some 200 to 300 people that presently serve on advisory committees in an attempt to stay up-to-date in the occupational programs. Now this is perhaps not innovative in itself; I would suggest to you that the innovations in terms of occupational programs may be in the use of advisory committees. If one can use advisory committees so that they do indeed tell you the types of programs that meet community needs, identify the types of instructors that are needed, help with placement, etc., than this is very helpful.

To specifically answer your question I would first discuss development of an attitude that is positive toward occupational education. I have previously discussed mix of faculty, mix of students, and certain developmental laboratories for students. Our developmental labs are in reading, writing, and mathematics. We are presently working on a speech laboratory that we think will be of great benefit to many of our black students and others who need special help with the type of language which business demands.

Another innovation of our institute was to get off the blocks very, very rapidly with occupational programs. Our first year we offered 27 occupational programs, of which 26 had enough students to be involved. We have discovered that even though our occupational program has the best equipment, and the best faculty, and the best facilities (which we don't have--we have 4,000 students all in temporary quarters, by the way) it is necessary to diligently recruit students to fill those laboratories. One of the things that has been very, very successful is a mobile counseling van which has gone to the ghetto areas, to factory gates, county fairs, and chicken fries, to enable both students and counselors to talk with people about our institution. We found several things here.

First, we are locating many prospective students that had not considered a college education or a community college education for themselves. We have found many people too timid to even walk into the van to talk, and for this basis we put materials out along the sidewalk; we put rear view projection screens in the counseling vans so that people can stand on the outside and get the viewpoint and then many times they come in

and say, I have a friend who might be interested in such a program". Now I might mention several other innovation practices which might not be germane to this group, i.e., how does a great university and a community college work together? (Remember, we are in a university community setting. One university has 35,000 students and another university three miles away from that with 16,000). We have many programs where the university serves as a major employer and we send people to the university, using university facilities as an industrial facility, if you will, to reduce costs, but to increase the opportunities for learning, i.e., our X-ray technologists take their training in three major hospitals in the area without cost of X-ray equipment at all to our institution. I could talk about the innovative techniques or university cooperation with the community college in training teachers of occupational education; in turn we send some of our students for advanced mathematics, advanced chemistry, and other advanced programs so that we run economical programs.

QUESTION: What is new at your institution that you are doing in classroom management that we can do, or take back to our institutions, that is innovative, or is a better way of getting information across to students?

I think the first step in answer to that specific question is in the area of student counseling based on the premise that student success depends on more than what goes on in the classroom. The first item is recruiting of students. The second item is, how do you insure student success? Within our counseling staff, we have a differential counseling staff unlike many institutions, particularly high school institutions where the counseling staff is highly dedicated and highly skilled in helping a person go on to a four-year liberal arts institution. On our counseling staff are person with particular skills in trade related instruction -- in health science -- in a whole host of areas and at several levels. The coaching techniques for occupational students, though not particularly innovative are successful because the relationship of faculty to student is a fairly tight one. Now, I would be kidding you if I said that this works beautifully throughout. It doesn't. There are some faculty members who perform this relationship and work with students outside of the classroom as well as inside the classroom. We do run very specific analyses of types of faculty-student relationship and attempt to then run correlations, between this student's success or lack of success. We are finding some rather interesting things about why students drop out of college. Twenty per cent of our student body that drop out, drop out because of shift changes. I never would have thought the percentage would have been that high till I had seen the figures.

In terms of the liberal arts area, I think we have a long way to go to be thoroughly innovative. Sure, we have audio-tutorial techniques. We have a number of students that are taking a substantial number of courses with an audio-tutorial

approach. This is not innovative only to us, since many colleges have highly developed systems of this type. We have students who are involved in various types of computer assisted type instruction. Again though not particularly innovative in terms of our institution, perhaps the unique note is what happens to the occupational student in this particular area in our community.

QUESTION: During your presentation you mentioned developing attitudes of work, and I would like some clarification concerning this and the possibility of cooperative education.

We have two programs which theoretically respond to different needs of students. The lowest level program "Project Impact" is for students who are generally older, who either have never held a job, or cannnot hold a job--have been fired repeatedly from jobs for one reason or another. They are given two weeks of specific work in attitudes of work. For examples, how do you get along with the foreman? What do you do when the foreman gets after you and you don't slug him? This sort of thing. In order to have these students in these attitudinal programs, we pay them $1.60 an hour. From the two weeks of very specific - 80 hours of attitudinal work - they then go into a semi-skilled job. The coordinator, working with both the employer and the employee. We find the employer has much to learn in terms of working with this person as does the employee.

Our second type of program "Step-Up" deals with persons at a higher level of competence. This person is in a work-study program, either with government or with industry. He has the guarantee that after finishing two years at the community college, he will move into a middle level supervisory position.

There are a number of people in both of these programs that frankly think you are putting them on. "No matter how much I go to school, no matter what I do, I still am not going to have a job when I get through". Many are very suspicious, or are very concerned that this is just another response of the white man, if you will, to run us down another track where the end is still dead end. Those two programs are in operation.

Part of the "Impact" program introduces participants to a number of college situations. They talk with counselors, they visit the college buildings. If there happens to be a tea at the college, they go to a tea. If LeRoy Jones' "Baptism" is being presented, they attend the play. Our experience has been that about half of those students indicate a great desire to take additional course work. This really isn't course work they are taking now, but they wish to take a particular course or a particular class. We are not yet far enough along to see what happens to persons in this relatively new program.

I think the biggest problem is to help industry and employers

recognize the need for development of good work attitudes and a social conscience in terms of responding to that need. The response, as I would see it, is a response which top management accepts more readily than middle management. Once we move through the channels of communication with top management, it is sometimes difficult to have middle management fully understand what their responsibilities are.

QUESTION: How long will you keep them in the first program (Project Impact) and pay them $1.60 an hour?

At the present time we have had them in the first portion of that program for 80 hours. After that they are paid by industry for the job which they have, but we will stay with them for at least a year and perhaps longer in types of follow-up work.

QUESTION: How do you equate industrial experience with academic qualifications in your salary schedule for faculty, and would you please be specific about it?

For initial placement of faculty, we use a point system, with points for years of college education, for work experience, for journeymen's degrees, or special licenses. From that point system, each point being worth $500, comes the initial placement. Industrial experience is determined one point for each year on an evaluative scale. If a person has been doing arc welding for ten years, we probably would not give ten years' experience. We evaluate both the quantity and the quality of that experience. If a person has had arc welding, heliarc welding, various types of gas welding, inert welding, and so on and so forth, plus supervision of welding type programs, he would then be given arbitrarily certain number of years' experience for this industrial opportunity which he has had, one point for each year, one point worth $500 on the initial placement screen.

QUESTION: How far along the salary scale would he start compared to one of the fully qualified academic people? In other words, if you start him at the ninth level, would you be willing to start a welder or a fireman at that level, or is he penalized somewhat?

It is one of the negotiations problems in our institution that we have some people with industrial experience and perhaps one year of college making more dollars than a person with a master's degree and five years' experience. We think this is equitable and helps us locate the faculty we need. This type of work experience can go just as far at the moment as a person with a master's plus 60 hours. The historians hate this, but it helps us to get the types of persons that we need much more easily. In our institution in the first year we hired 50 people. We had 1,500 applicants. Of the 1,500 applicants, 1,200 were in the general studies area, 300 were in the occupational areas, which gives you some idea of the range of difficulty of finding persons with the types of skills which we

have tried to emphasize today.

QUESTION: You mentioned that 18 per cent of your students are black, and I would like to know how many of those are in the occupational program?

The answer is about half; half the black students are in occupational programs. This is not without considerable effort and considerable work to have them understand the opportunities in the occupational areas.

QUESTION: Please describe the organizational structure of the top management of the college in terms of emphasizing occupational education.

We use team approach, with six people in the top echelon management type of position -- the Dean of Occupational Studies, the Dean of General Studies, the Dean of Student Personnel Services, the Dean of Business, the Dean of Special Projects, and the President. Within this area, one of the things that we attempt to do is to find people that understand occupational education. For example, the Dean of General Studies, as I mentioned, has had a good deal of engineering experience. His background is that of a research historian, a person who has had two very successful years in college engineering. He is also a librarian. This combination of skills and experience promotes this type of understanding.

Now, there are major problems with this type of structure in that it violates the principle of having one chief institutional officer. This suggests that the formation function is one which takes a particular responsibility, but the key here is that if you had only a Dean of Instruction, under that Dean of Instruction probably would be a Director of Occupational Programs, or whatever it might be. The fact that many of these top echelon people have additional skills is very helpful. Again this Dean of General Studies, for example, has great skills in working with the culturally deprived and the culturally disadvantaged. The Dean of Occupational Studies has had a great deal of experience in counseling and guidance, and also working in the general studies area. The Business Manager is a journeyman.

QUESTION: How do you get the advisory committees to counsel on the basis of the education philosophy and basis of the college?

This is a difficult question. I would attempt to answer it in this way. First, the Board of Trustees appoints the advisory committees in which we attempt to get the type of cross-section that is needed. Second, it seems to me one needs to have some give and take and flow of people, some come on and some come off, so that we don't have advisory committees that stay in power forever and feel that they have a vested interest in doing their particular thing. Third, it seems to me that there should be a good deal of what I call reciprocal nudging

going on between the board and between the advisor of the advisory committee, and the advisory committee itself -- a considerable amount of dialogue. Fourth, it would seem to me that advisory committees should be given work and responsibility. We need their advice in certain areas. We need their advice in terms of what type of faculty we need, what type of programs we need, what type of courses we need. We want their help in placement. We need their help in getting dollars for equipment for this institution. I think there are also times when an advisory committee may make recommendations which you may turn down. This has happened in our institution and we have given the reasons they are turned down, telling committee members we feel they are not addressing themselves to the specific questions which need to be analyzed or not giving us good advice. Let me give you an example. We have a dental assisting advisory committee, consisting of qualified graduate dentists that recommended a salary of $100 a week for two years of training as a dental assistant. Our response was that if that is all the person is worth after two years of training, perhaps we should disband the program since after two weeks' training, you can go out and work at a supermarket and earn a greater salary. Well, this is the type of reciprocal nudging which I talked about.

I think another thing we do which is a side issue but may be helpful, is that we list all of our advisory committee members in our catalog. We list the specific program on one side with the advisory committee directly on the other side. This enables students to be in touch with committee members to talk about the programs, to talk about the community college. We try to give recognition for efforts which these persons make. Once a year we bring in outstanding national speakers for a dinner meeting to give them some progress reports and to also challenge them with new directions which we feel need to be explored. These are some of the techniques which appear to work for us. Also, there is an excellent book out now by Sam Burt concerning advisory committees containing a number of additional ideas which are well worth reading.

QUESTION: Do you use MDTA and other federally sponsored programs, and what do you see is the relationship between these and the other programs?

The answer to the first question is yes, we do. Do we see any differences in philosophy between those programs and the community college programs? The answer is, no. Our philosophical approach to this question is that the community college should have an accordian curriculum, that it should expand and contract with the changing needs of people. We try to develop as many and as diverse programs as possible using MDTA funds, federal funds, many of them very minimal, state funds and a host of other different funds, many of them from local sources. We aren't particularly concerned about philosophical constructs. We are concerned with an attempt

to offer programs if there is a group of x-number of people that need to meet particular needs, such as refresher programs for nurses, training of special workers, etc.

QUESTION: The person I work for said that five occupational programs starting in one year would be a big mistake. Dr. Ponitz indicated his college started 26. I would like the speaker's definition of an occupational program and also an estimate of the cost to begin such a program.

I was president of a community college in Illinois and also heard this recommendation coming from those persons who knew much more about it than I did. When I talk about a program, I am talking about a program such as electronics, automotive body repair, X-ray technology, data processing, educational technician, secretarial science -- general programs, not courses. The costs are fantastic.

Let me give you my logic and my rationale for moving ahead with 26 in the first year. Number 1 - we were a new institution. Number 2 - I thought it extremely important that we move out very rapidly and very quickly with occupational programs, since as I looked at colleges, those that did not start out very quickly in these programs tended to move very, very slowly. My recommendation to the board the first year of operation was that they levy the full mileage - the full mileage that was levied allowed the college to actually spend a double budget the first year. Most of that budget went into the types of equipment and the types of planning for occupational education. Further, it was my observation that as I looked at colleges across the country, those that started and planned to add additional programs in three or four years, by and large did not, and that they became a type of college where the number and percentage of occupational programs was very small and stayed that way ad infinitum.

This then was a distinct calculated approach to a board that said, "We feel strongly that this college should deal in occupational programs, and if it deals only or primarily in general studies programs for general studies students, we shouldn't be in existence". Now, to be sure, our type of community was somewhat different from others in that there were a number of other opportunities for liberal arts programs in the immediate area. I think the issue that I would pose is that there are 50-60 new community colleges starting each year, presumably wanting to emphasize occupational programs. The point that I would make is that in analyzing these new institutions after five years it would seem the response to occupational programs in reality is very little. Another concern that I have regards the problem of trying to hire people in the liberal arts who have a real talent for teaching the general studies subjects to the occupational student.

Also, it is very, very important that you have enough of

a nucleus of occupational people that can speak up for what occupational education is all about. If you have a ratio of 80 per cent general studies and 20 per cent occupational, dealing with faculty senates or negotiations, or whatever it might be, in my opinion you are going to have a very, very difficult time continuing a viable occupational program which will be flexible enough to meet the needs of all the students who need occupational training or to meet the needs of industry.

Now, one other thing which has been helpful to us. I continually preach to our advisory committees on occupational education and to our industries and to others who want this emphasis, "Look, part of your responsibility is -- keep the pressure on us because unless you keep the pressure on us, I tell you now that it's going to be very, very hard to keep these programs in. Keep talking about them, involve your own types of clientele in these programs. Send these persons to us. Give us the type of pressure which continually tells the community of the importance of occupational education.

One last item. Most new college campuses begin by first building the library and the general classroom. We have taken the reverse approach to this particular question. Our first two buildings will house occupational type programs and laboratories. Once again, we felt this substantiated community desire about values of occupational education.

At the moment we have 4,000 students, all in temporary quarters. It has been hectic, to say the least, to develop laboratories in that type of gerry-built construction--World War II surplus construction--to meet these needs, but these are the types of things that you have to do to sell occupational education, to give it some of the pizzaz that we talked about, and further, this then hopefully keeps the pressure on, and it continually allows the community and the board, to say, "Yes, this is what we want". And at board meetings, and board sessions, many times we have to say that if our commitment is to occupational education, these are some of the steps we must take. Are we willing to take that step? You don't take that step once a year, you take it at many board meetings throughout the course of the year in terms of continually committing yourself to what the college is all about, and if the board says, "No, that is not what we want", then what should be said too. So all of these things tied together seem to put the thing into a package.

QUESTION: You mentioned in the talk concerning the growing resistance to occupational and vocational education programs, and the quotation of Robert Hutchins. Where does this originate, and what is the alternative?

I think we must first recognize that the people look at a proper education in terms of their own aspirations. Community college people must be screened very carefully in terms

of the attitudinal approach. If a faculty member is looking for a traditional four-year liberal arts approach, working only with white middle-class attitudes, his place is not in the urban community college, because that is not what the urban community college is. This needs to be screened out very carefully. People are very facile with the word nowadays, and there are still some that drop through the screen because they give you the right words to obtain a job in a certain geographic area. They may only speak in words, but not in attitudes.

I think the response to the Hutchins group and the other groups involved is to say that first, and foremost, for many of our young people today, as well as older people, the first key is, how do we get people into the economic mainstream. Number 1 - now in opposition to this is, we want a well-rounded man. But I don't know how you are going to get a well-rounded man if he doesn't have the types of skills to hold a job. And I would take two positions, first, let us get the person started. If intermittent education is what the world is all about, and I think that it is, let us get the person started in a job and some of these other things will come. Through success come other challenges, come other successes.

Now Hutchins will disagree with this very strongly, but I think he is only talking about a very small band of the population, and if the community colleges take up their role of working with a much broader band, you can't afford to teach only "the broad liberally educated" person. Because the moment you start that Mickey Mouse stuff, he is going to drop out in six weeks or less. I believe strongly even in the occupational areas that we have made some mistakes. In the two-year programs, we many times save the real goodies, "to get your hands on this machine and to do it", until the second semester of the second year. I say that if you are going to save that person and get him started, you had better give him some of the "goodies" the first week of the first semester if you can, or otherwise you are going to lose him. I think we simply have to ignore Hutchins as responding to a renaissance person, since he addresses himself not to the full America, which this group needs to address itself to, but to a very narrow segment of what America is all about.

Let me address myself to a question concerning the "I don't know student" who says, "I don't know" in high school and then comes to the community college and immediately we expect him to make a choice. Now, we have a number of "I don't know" students in the occupational areas and we do several things. One, first, we go through counseling with them to suggest certain areas where they might be successful or unsuccessful, Two, for those that are involved, we say, "if you want to take more time, why don't you take a drafting course and an automotive course just simply as a survey type

program to find out what programs you might be interested in". Three, we have a great amount of changing around and I'm not very concerned about the switching in occupational areas because more and more we are talking about developing the multi-discipline, i.e., the electrical, mechanical and chemical type of approach.

A number of persons do take three years to finish a two-year technical program. First, because when they come into that program they are not sufficiently outstanding in math or some other area and are taking developmental courses. Second, they may take different programs and slide around a bit. Let me give you an example. A young man that I had the first semester of the first year in a freshman seminar course started on electronics. He had difficulty in electronics and switched to drafting. He didn't like drafting and went into mechanical technology as a general field. He finished up in three years with an associate degree in mechanical technology but with a speciality in numerical control in terms of operation of machines. All right, the man did poorly the first semester of the first year, but we do not have academic probation, and we do not drop the person out of the college because he has not succeeded. We have simply said that perhaps our counseling techniques and your knowledge have simply not yet aided you to find the particular niche where you belong and this suggests you need to come back. Now, your response to me was this might allow all the playboys and playgirls to stay on forever and I expect it might. Dr. James talked about the three-year person trying to make it a three year student program. I think we have some that will probably take four years as almost full-time student to complete their work. I am not concerned about giving these opportunities and allowing people to mature within those options. I suspect we will be having some adults that will be coming to take one or two courses that will probably take eight or nine years to finish and that they will be back with us from time to time and finish up in eight or nine years. My response is, "Fine!" Allow them those options with the greatest flexibility possible.

QUESTION: The question is concerning the overlapping and competition and the problems relating to this in occupational programs; and would like to know what problems they had relative to this at Ann Arbor and Washtenaw Community College.

Let me respond to your question at the college level and then the high school level.

At the college level, our response was to move very, very quickly. I suppose one of the reasons why, pragmatically, was that the State said that after the year in which we started they would approve all programs. I, frankly, was very concerned that that approval would take a year to two years and that we couldn't wait that long. I was very concerned about

the bureaucracy at the state level in terms of approving of that particular program so we started 26 immediately knowing that that would face us the coming year.

I think the question in terms of duplication which you raise I would raise in another way. I am not concerned about duplication of programs and I will tell you why. I think the key word here is utilization. There is an automotive laboratory which is being utilized fully and there is another one five miles down the road which is also being used fully. So be it! Both should be in operation. The key concerns the amount of utilization we do have. Our experience in a large urban area was that the needs of industry and the reaction of people somewhat open-ended, and for this reason we could move very rapidly. This would be quite different, as I would see it, in an area which had a smaller population or where the population growth projected would be slower than it would be in our particular area.

In terms of high schools - did the high school drop some of their programs? No, they did not. The high schools in our area have some programs but not of sufficient consequence to make this a problem. I do foresee the time, however, whan an area vocational program for high school students moves along at a better level and this would suggest that some of our programs should be dropped as we move into certain other areas. So I see need for a very substantial articulation to be continued between high school and colleges to allow a very smooth transition. If a student comes into our program from an automotive shop; for example, our program is to simply place him as to where his skill level might be. If he understands engine dynamotors and chassis dynamometers when he comes to us then, we will put him in advanced engine diagnosis. If he has had no experience at all in this area, we will start him at the bottom. If he is a student that has minimal skills in terms of opportunities; in terms of a special education student; for example, it might be a program in simply learning the total greasing of a car at that particular level. Once again, the key is flexibility for the individual rather than some type of organizational construct which we force each person into.

QUESTION: What criteria did you use when you developed the 26 occupational programs?

In the State of Michigan there is a requirement that a study be accomplished before a community college is formed. As a part of that study there were a number of questionnaires which went both to students and to industries trying to find out what types of projections industry had for needs and what types of interest students had in terms of types of things they would be interested in. Our particular community has three or four major thrusts where there are great numbers of hospitals in the area, both research and residential type hospitals.

The second area, because the University of Michigan is spending sixty million dollars a year for R and D, there are

a great number of needs for sophisticated technical responses such as fluidics, hydronics, hydrolics, pneumatics or electronics, etc.

It's a heavy industrial area: production of automobiles. This was well defined in terms of their needs. And it's a major central area for needs for wholesale and retailing so these general areas were quite well defined and within those specifics then we moved ahead in developing families and clusters of families which could lean upon one another.

QUESTION: Would you expand on the role of the advisor and counselor in this human approach to counseling that you mentioned in your talk.

We take the full-time counselor first. The full-time counselor must be a differential counselor. What I am saying is that the skills of the counselors which we have range from psychiatrist to psychometrist, to test specialists, to techniques of transfer on to a four-year college, to persons with specific skills in health occupations, specific skills in other areas. These persons serve a two-fold role of each having x number of students, about 300 students for their counseling, and likewise of helping other counselors understand the total function of the college. In addition to this each instructor, by contract, spends approximately six to ten hours a week advising and counseling with students. This has not worked out as well as I would like, quite frankly. I think we need to find some way to develop a one to one relationship between the faculty member and the student to help that student feel that he has, what I could call, an advocate on campus. I have seen students drop out because the student had no place to turn. There is a good basis for research to show that exact point both at two-year and four-year colleges. I think this is one of the real up-stream items of the community which requires constant prodding in order for good counseling to really occur. Unless you do it, you have a high percentage of phantom students and a high percentage of students that drop out.

Mr. Clifford: I am sure I speak for all of those attending the conference when I say, "Thanks for an excellent presentation this morning".

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

A Presentation by F. Parker Wilber, President, Los Angeles Trade and Technical College, Los Angeles, California.

Thank you very much Dean Hoffman. The PR here at Delhi Tech is certainly excellent. I have been made to feel welcome every day, and every minute. Only last evening as I was riding over to the theatre in the neighboring town--my wife pointed out to me the sign on the front of a bank that said Wilber National Bank; and a little farther down the road there was another sign--Wilber Park. Now, this is carrying it pretty far; somebody at the college is outdoing themselves in their PR activities. But I do appreciate it all.

I am going to talk to you principally about the community college I represent. I'd love to talk generally about California community colleges, but that is not my task on this occasion. I'm narrowing my sights to the operation of Trade-Tech College--the way we do it; and I'll try to tell it pretty much "as it is", like the presenters have been saying all week.

Having seen a bit of vocational education over a period of some 37 years, I believe that this little corny story is most appropriate to our discussion here at Delhi. One of our alumnus returned to school and wanted to see his "prof", but the prof was busy. So he walked in and sat down at the professor's desk and waited for him to return. In the meanwhile, he looked at an examination paper on the prof's desk. And as he expected, it appeared to be the same examination he had taken many years before when he was a student. So when his friend, the prof, returned he says, "Ah, I've got you now for sure; you're asking the same damned old questions". But the prof replied: "Yes, but we have changed the answers". And I think this is the essence of what is now going on in vocational education--we're changing the answers. The problems are not new ones, neither are the basic socio-economic questions.

I have been most encouraged by this week's presentations. Under the common umbrella of occupational education, we are narrating different experiences, from different points of view in different parts of the nation. Seemingly, we have had the courage and initiative to try out means that we think are best

for our locale, or our state; and we're not embarrassed about it! It must be that some of the leaders have been willing to change their mind. Do you know the story about the four lumberjacks? They were working up in the high Sierra country of California and the cutting season was about to close. These four lumberjacks were the last of the crew--two of them were Catholics, and two were Protestants. And the two Catholics remembered that the good father was going to come up to the camp and give Mass and they thought they had better show up for this last Mass of the season. So Pat said to Mike, "we've got to be there on time--set the alarm clock, we wil get up early and we'll go". The alarm clock went off, of course, in the middle of the night. The fire had gone out; the room was cold; outside, the snow was piled high against the window. The two Catholics were shivering and shaking as they pulled on their long drawers. As they looked over enviously at the two Protestant guys who were snoring and sleeping comfortably beneath their blankets, Pat said to Mike, "wouldn't it be Hell if they were right and we were wrong?" I suggest to you as administrators that we raise this reasonable doubt every day of the year. There is always the possibility that some other guy has found an approach to program operation that is as good or even better than our own.

To understand the community college and its environment in California, one must understand the Master Plan for Higher Education. By virtue of this state plan, enacted by the legislature into law, each segment of higher education has its own educational mission. The University of California, the State Colleges, the private colleges, and the community colleges have clearly identified missions. The Master Plan for Higher Education functions through a central organization including a director and staff; the council is comprised of representatives from the four educational segments, equally represented. This council determines policies, conducts research and reviews matters of importance to higher education in the state. This coordinating council, also, in reality acts as the advisory council to the State Legislature. By law this council has no legal authority whatsoever, except to seek research information, obtain reports and feedback information to the field or the publics. Consequently, no one can ignore their requests nor shuttle them to the waste basket. It is mandatory to cooperate. But, so far as getting their formalized recommendations into action, they have no authority over any of the educational segments. Their leadership is related mostly to effecting attitudes of legislators and distributing information to the public; they depend principally upon persuasion and upon public relations activities. The coordinating council has cleared the way for better understanding and diminished competition for state budgets among the segments.

In California, the governor is the most important figure in education. The University of California is under the authority of a Board of Regents, all appointed by the Governor; the State Colleges are under a Board of Trustees, all appointed

by the Governor; the Community Colleges are directed, at the State level, by a Board of Governors (all appointed by the Governor). It is rather obvious that, in our State, the Governor has a great deal of authority and much influence upon education.

The public schools (elementary and secondary) are under the direction of the State Superintendent of Public Instruction and the State Board of Education. By virtue of the fact that historically the Federal Vocational Acts were administered in our state by the State Board of Education for the public schools, the Community Colleges, with their vocational programs, find themselves in a dilemma. So for the present there is a considerable division of authority, and segmentation, in respect to federal funds for vocational education. However, there are fairly good, reasonable understandings that have been reached between our Board Governors and the State Board of Education.

Our Board of Community College Governors have a vocational educational staff of considerable size, and it is fully capable of servicing our college programs. In order to keep a cooperative relationship between this Board and the State Department of Education for the Public Schools, and to avoid difficulty in the distribution of Federal vocational education funds, there has been named a joint committee of the Board members from each of these two groups; they are going to review plans, relations, budgets, etc. for community college vocational education and for secondary vocational education. At the moment this arrangement is proving satisfactory.

In our state the community colleges do not receive any large state or federal financial support. In our state, between 25% and 35% state support is an optimum expectancy. In the Los Angeles district we received between 16% and 17% state support in 1969. Where does the rest of the financial support come from? Primarily, the local taxpayers support the college to the extent of about 77% from local property taxes; we receive only about 5% Federal vocational funds. So you see, when I talk about Trade-Tech being a community college, believe me, friends, our college had better be oriented to our community because it is our main financial support. The community is not only our service area--it is our life, death and future--financially speaking. I think this relationship is a good thing. It behooves a community college to be concerned for relating its local area. This relationship is different from the state colleges and the University of California, both of whom derive their financial support from the legislature. They feel no responsibility or concern for neighboring communities, localities or regions.

By state law our admission policy in California is "open door"--you probably know that specifically any high school graduate, and persons 18 years of age can profit by instruction, are eligible for entrance into the community college in

California. To clarify this--admissions is mandatory for all high school graduates; it is considered obligatory, but judgmental, for the admissions of persons 18 years of age who have not earned a high school diploma. At my particular college, between 85% and 90% of the students are high school graduates.

Now, for a few facts about Los Angeles Junior College District. It's a very large district, about 50 miles across, from corner to corner; approximately three million people live in the area. Our Trade-Tech College is located in central Los Angeles in the downtown business district. Altogether, we have eight community colleges in our district with an enrollment of more than 90,000 students. From the central location of Trade-Tech College to the far north boundary is a distance of over 30 miles; to the south boundary, some 20 miles; eastward about 10 miles; to the west about 15 miles. In terms of population groups the valley area is a suburban, a "lily white" valley. The harbor area represents a mixture of races and foreign people and many Slavs. The east side of Los Angeles has the largest group of Mexican people in any city of the northern hemisphere with the exception of Mexico City. Over 400,000 Mexican-American people live in the east side of Los Angeles. On the north side and west side are Russians, Mexicans, Orientals and now Negros are moving increasingly into these areas. Southward and adjacent to the college campus is a very large Negro population including many socio-economic levels of society from the well-to-do to the people of extreme poverty. Our college sets in the middle, the urban hub, of large minority populations and a rapidly changing social environment. That may give you a little indication of the size of our district and its complex population.

Our enrollments come from the 50 senior high schools of the Los Angeles unified school districts plus high school in the adjacent suburban school districts, such as Montebello, Alhambra, Beverly Hills and Culver City; all of them sizable city school districts; they are all a part of our junior college district.

The budget for our community college district is $85 million this year. The operational tax rate, by state law, is 35 cents per hundred dollars assessed valuation, a statutory limit. Our district, unlike most colleges, has not succeeded in getting the public to vote a tax increase beyond this 35 cent tax limit. We tried in a recent election to get the 10 cents added to the present rate but we were unable to get the support of the public for it. Beyond this operating tax limit we can add 10 cents for adult education; 5 cents for community service; and about another 5 cents for bonds, personnel retirement, medical plans, etc. So our actual total junior college tax rate is 42 cents. This is perhaps the lowest college tax rate in any major city in California.

Nearby, our particular college (four blocks) is a large, enterprising adult education center. This training center takes a considerable amount of pride in having a large, rather diverse

vocational training program. There are something like 2,000 individuals enrolled in that adult center. As a matter of fact they have refurbished the old 10-story building which we vacated two years ago. They aim to develop, on a reduced scale, a Denver opportunity school offering short term vocational programs, up to one year in duration. We are in operation at a college level; they are operating at an adult level. We don't predict any real serious conflict between our institutional services. But it does mean, in short, that the community publics now have a two-way vocational opportunity at whatever level they may wish--short or longer term. We think that many who go to the neighboring adult center and get a basic training will eventually gravitate to us for more advanced levels in their occupations. We don't see this as a threat; both of these kinds of services ought to be rendered. The fact that both of our schools are full of people seems to prove my thesis.

Here are a few more facts about Trade-Tech. We have reduced down our locations from a central campus with 14 branches to a central campus and only five branches. We are hopeful to eventually pull the whole school together, with the exception of the aircraft branch. About every time we think we are getting together we get the continuous pressure upon us for some new service, requiring another rental conflict with this campus aspiration.

The campus space we have is very small, only 25 acres. We've had to build buildings into the air from necessity; land is terribly expensive. We paid $240,000 for a piece of property about 220 x 200 feet in measurement. By the time we tore the building down we had a quarter of a million dollars investment in this small parcel of land.

Our instructional departments comprise 14 technical and trade departments and four academic departments. Our educational objectives are what you'd expect from most comprehensive colleges. We do pre-programming; occupational pre-training and upgrading training; we include lower division academic training especially in general education; we conduct retraining specially designed for community groups; we do extensive apprentice training (about 3,000 each year) and we do a good job of citizenship training. And we have a number of special ethnic courses for Black and Mexican students. As a matter of fact, we may offer anything that is permitted for community college to offer.

Students are most fortunate in California--there are no tuition fees for credit courses in junior colleges in California; tuition is permissible for adult classes. Students may purchase a student body card for $6.50 a semester per full-time student and $2.50 for part-time students. Perhaps partly because of these small fees, we have many students from out-of-state. Our student body is large--about 5,100 or 5,200 full-time day students and between 9,500 to 10,500 evening,

part-time students. The average day student's age is 22.8 years. Our typical age level has moved continuously downward from 29 years of age to the present 23.0 level in recent years.

The day program represents a majority of men in ratio of two to one; in the evening hours, the men represent three out of four attending. Although we seek to offer many women's programs, and you may have found the same experience, the women preferentially mostly enroll in short-term programs rather than long-term programs. We do not have the best luck in recruiting them for some high paying programs that require a couple of years preparation, even though some may graduate directly from college into jobs paying $700 a month and up. Women can qualify for training and employment in technical fields that pay much more money than they are likely to earn in secretarial or clerical work.

The capital outlay at our college includes equipment, land purchases, improvements and new buildings. We purchased an old high school and its eleven acre campus and proceeded to modify it to our use. Based on my experience, this is not the ideal way to build a college campus--especially a vocational college. What buildings can be remodeled? What are the comparative costs of remodeling versus new construction? How about a master plan? We finally determined that we could use the best buildings in the central campus area and tear down everything on the periphery; this enabled us to erect new buildings on the two sides of the campus and created a good PR appearance to our campus. Perhaps one day someone will get the finances together to knock down the remaining old buildings hidden in the middle of the campus. I wouldn't underrate the vital importance of the campus buildings and physical appearance to the public. It is not only generally important, but, I think it is doubly important for a location in the downtown areas, and for the advantages of minority populations. So we try to make the campus an attractive place. Apparently others are reacting favorably; just a few months ago, the Los Angeles City Council passed a resolution commending our campus as an "oasis of beauty in the central city". We now have invested $38 million in buildings and grounds. Our annual operating budget for 1969 is over $7 million.

A college of this size needs a large staff, teaching staff 275 (day); 512 (evening); 191 support personnel -- secretarial people, custodians, labworkers, etc.; also, we have 48 workers in the student body organization for the student store, etc.

Recruitment at Trade-Tech is unusual in that we rely on a great deal of personal contact with a large number of communities and school districts. Our Los Angeles city high school graduates comprise only about 20% of our semester enrollment; Los Angeles county-3%; State of California-2%; the parochial school-6%; out-of-state-2%. Of the approximate

700 high school districts in California, we draw a few from 106 of them. Thursday night, one week ago, we graduated a lad who lives in North Carolina.

In summary, we draw a total of only 44.5% from "feeder" educational institutions, as transfers or as recent graduates. But think this one over, our major input comes from the out-of-school youth and adults (55%). To emphasize my point, we must get every Fall, 55% of our total enrollment from sources other than district graduates and transfers from other schools. So you see why we work so hard on PR at our college. Also, long ago, I came to the realization that in the publics' estimation, vocational education is second best to traditional education; so I accepted the philosophy that has been recently popularized by Avis, "we try harder". If that is the way it is, then we have to work a little harder.

On the basis of experience as president of a large cosmopolitan community college it's really no problem to fill up the academic area of the curriculum. It takes no effort and it takes minimal school articulation, assuming you have a good academic staff. Further, the problem of articulating with the universities and colleges are not gigantic ones; the academic schools always want good prospective students. Just about the simplest thing we do is to work out articulation agreements with universities and colleges, and get our qualified students accepted. The continuous and difficult problem we occupational educators face is to recruit a constant flow of people into occupational programs where the applicant can achieve, profit, and become employable--this is our real task. Most vocational educators do not spend enough time in this area of promotion and community PR.

As I'm going to talk about curriculum I am going to pictorially illustrate our programs by the use of color slides taken at the college; let's see the curriculum in action. First; we're located in the central, downtown area, 200,000 trucks and cars go roaring by our front door. These are the commercial buildings joining our campus and near a deteriorating neighborhood. Recently there is much property rebuilding and land values again are rising rapidly. The kind of businesses moving into our area are service occupations, suppliers, apparel manufacturers, service organizations, gas stations, auto agencies, etc.; this is an old Poly High building that we are still using for administrative purposes. We did restore several old buildings and continue to use them. But we determined in our planning that some buildings would have to come down. One of the hardest jobs of my life was to get approval to tear down buildings that were only 25 years old. But we knew they would not meet our requirements as they were designed for a high school; and we did get them torn down to provide the space for modern buildings.

The typical design of our building feature all-around balconies--there is no central circulation--all exits are to the porches. This might not work in a cold climate; for us

it works very well in a moderate climate.

This is our million dollar gym, locker building and recreation facility. Hopefully we anticipate putting a swimming pool in between these buildings. One innovation for us is that we are starting a big recreational program for the community on Saturdays in our campus and several evenings each week in our new gym. This is another source of PR as well as serving our community more fully.

The large rubber tree in the foreground of this slide is over a hundred years old; it is one of the beautiful sights in the central part of the city. This is a typical sight looking down a balcony at our rubber tree, an area where the students love to congregate; the tree provides nice shade in the summer months. And, another quick look at the quad; it's relatively small, but we've just tried to do the best we can. By judicious plantings and trees our landscape architect has succeeded in making it look very attractive.

This is an architectural rendering of our 800 foot long building that houses metal trades, plastic fields, automotive, diesel fields; there is roof parking that accommodates 400 cars. It has been structurally designed so that we can add three more stories of our choice - parking, classrooms, labs, or whatever. So we've provided expansion for the future. Incidentally, all of our buildings are structured so that if it became necessary to remodel, we could "gut" the entire floor of any building completely and change it as needed.

This slide shows the old Metropolitan College building which we continue to use--this building was a business high school. It is located some four blocks away from the main campus. Because Metropolitan College was so expensive an operation (by per capita cost comparisons) and it was declining in enrollments, the school board made the decision to merge it into Trade-Tech. Believe me, merging two colleges is an experience! This requires meshing into one organization the two faculties, two systems of operation, the office personnel and the joining of two associated Student Bodies. I don't recommend it. You can guess where the most trouble came from--merging of faculty senates. "But that's the way we've always done it at Metro", was the theme of one group and of course the Trade-Tech people said, "That's the way we always did it at Trade-Tech", and consequently these two individual faculty senates really had serious adjustments in learning to become a united faculty.

This is a rendering of the new building for which we have the money (about $3,500,000) to be built and replace the old Metro building; it will be on campus and it is really going to be an architectural show piece as well as a functional building. This rendering illustrates the first phase; the second phase, six stories, goes up along side and two floors are added over the top of the phase one building. It is de-

signed so that when the second phase is added the south wall opens up and the existing departments expand horizontally into the second phase.

Testing and guidance is part of our procedure for day school admissions. This operation goes on all of the year, with the exception of Christmas day, New Years day and Federal holidays. It is not closed during school vacation periods; and it is open all through the summer. Interviews are a part of our admissions and a very important element of our counseling process.

Our library is nothing distinctive. For lack of building funds we are doing as best we can with two libraries, neither of which is modern. The book collection and instructional materials are first rate, but the facility is out-of-date.

Our academic departments are housed in former high school rooms designed for 35 students. We left them that way, so we keep the maximum class size of these academic classes to 35-36 students. We have not promoted the idea of large lecture sections at our college.

Physics, science and math are required as applied instruction for appropriate trade and technical students; we also offer the "transfer" courses in physics, science and math as well for those who propose to go on to four-year colleges.

There are many advisory committee meetings. Generally, four days out of the week there are some one or two advisory meetings held at our campus. We have 67 standing committees and they meet regularly. We had 160 meetings with them last year. Also, it is commonplace for us to have eight to ten ad hoc trade committees considering or developing new curricula.

Data processing and secretarial business courses are very popular curricula. This will interest you - many of these programs have been conducted on industry loaned equipment. I recommend the use of "loaner" equipment, because if it gets passé, the owner wants it off the floor and a new piece installed. It's a better arrangement than a gift; to replace a gift the Board wants to know why it must be replaced, and they must furnish the replacement funds. Besides, gifts offered to schools are often out-moded equipment.

We have about $180,000 equipment loaners in the printing department (about 50% of total equipment). In this department, we have stripping, plate making, and lithograph presswork. We have four-color cameras, each camera is of a different type. That points up one thing we've learned--we do not have many of any one type of production equipment on the floor of any department. Our principle of shop planning is to provide our students with an exposure to all the variety of equipment typically found in that occupation. In my view, it's a tragedy when I observe a vocational shop and see ten identical lathes, manufactured by the same company, standing neatly in a row on

the floor.

Lithographic stripping is an important laboratory. In the printing curriculum we have a graphic arts production manager program. The graduate from this program may go out to work as a salesman, as an assistant printing production man; or he can elect to transfer to a California state college as a junior, continue through their program in business management and graduate with a B.S. degree in printing management. All the production supervision of the college produced is done by these students. And as you can see, the product is very professional in quality.

This is one of our several machine shops; yes, we do have numerical control equipment installed.

We have a hundred stations in our extensive welding shop- and we can offer any type of welding needed for employment.

Metallurgy. We are proud that we promoted the first two-year metallurgy program at the technican level in the United States. This field remains very hard to recruit for, as the young people we seek for admissions often may qualify for entry into engineering. So this curriculum is a tough one to fill. We have two teachers in it.

And plastics; this is a rapidly growing industry. And by the way, at the early stages of our industry-college planning, we couldn't get the funds needed to start the plastics program. I was certain that the trade wanted the program to go; we were satisfied as to the industry need, as we had checked this out. So I stated to them in straight forward fashion, "Gentlemen, if you will provide us with the first year lab equipment and supplies (that's always the most expensive portion), I will commit myself to get Board approval to purchase the second year lab set-up". This strategy accomplished two things. First, it tested their true need and concern; we found out that they were't playing games, as they presented $75,000 worth of equipment to us in about 60 days. And second, it gave me a year lead time to get their project into a new budget. I suggest this is not an inappropriate approach to promoting expensive programs.

Our art department features commercial art courses of all types; advertising layout, illustration, etc.

Sign painting is a very small craft occupation but we continue it. We successfully place students into this field each year. This may interest you; we've continued a number of small crafts, that were traditional at our college in its earliest years. Even though the student placement may be only eight or ten people a year in those crafts, in the eyes of employers in the community these graduates are important to their craft as the bigger number of graduates are to the larger occupations. Don't underrate the public relations aspects of

some of these smaller fields.

This is an excellent art exhibit put on by the art department showing student work.

This is the main lab in the photography department. We teach all the typical commercial photography fields for which there is employment for graduates.

Technical illustration is a big field in Southern California.

In the hiring of vocational instructors, we're trying to employ people who are graduates of our college who earned their Associate Degree. We find that they usually become very successful teachers as they have a feel for the students' abilities, needs and interests--so to speak, "they've been there".

We have a nursing department that includes vocational nursing (at present) and at mid-year we start a program in registered nursing.

Through our cafeteria services, we provide feeding for about 1,500 students at noon hour and about 400 at the dinner hour. The food is prepared by our students enrolled in chef training, restaurant operation management and other culinary arts classes. We use the cafeteria as our training outlet for our food preparations. The students get the advantage of a wide variety of food, well prepared, and at moderate prices. This entire operation is financed as a student body activity, on a non-profit basis. It is partly managed by students in the Restaurant Management program.

Commercial baking is a very small craft but the graduates are in high demand; we place people in this field as far as two or three states away. And the pay is unbelievably high for top flight bakers because of the scarcity of the people adequately trained for it; I doubt if the publics think of a baker as making as much as $2,000 a month salary. Many educators have their nose "turned up" in this world, forgetting that some craftsmen are making much more money than they earn in teaching.

Auto mechanics is a popular program. It is one of the four original training programs that started back in 1923 and continued all through these subsequent years. Every variety of automotive specialization you can name is taught here. Who enrolls in an auto mechanics these days? This may interest you. Last week I sat next to the new vice-president of the student body. After introductions were made we got to talking about his interests and aspirations. He's a lad who has earned an Associate in Arts degree in business administration from Valley College, one of our Los Angeles community colleges. I said, "Well, with your A.A. degree, what in the world are you doing here? What's your occupational field"?

He said it was auto mechanics. And then I asked him why the switch to auto mechanics. His reply was, "Well, this is the way I figure it out. I worked the last three years in a service station putting myself through Valley College in business administration. I learned a lot more than just filling up auto tanks; also I found out through my courses in accounting that I didn't really like it. In the meantime, while working nights in a gas station, I found out that I did like auto servicing--so I decided to change to this other route. That's, in short, why I'm here". And then he went on to tell me that one day he plans to own his own shop and then he expects to use this business management stuff and my accounting and I'll make the two work together. Now there's a young fellow who has a well-defined goal. Nothing is likely to stop that lad from being successful. His final statement -- "I also found out that the best I could do as an accountant was about $10,000 a year; as an auto mechanic I'll make at least $15,000". Money is a part of the appeal in occupational choice of students.

Don't think our students aren't serious. Here is a guy doing a drafting project, utilizing the rear trunk of his car as a table top. As I took this photo, I thought to myself, our students are the most practical minded people! It was the only flat place he could find, as the library was filled, all the labs are filled from 11:00 a.m. to 2:00 p.m., the shops are crowded; but he was not frustrated--he parked his car and made do with the nearest flat surface at hand.

We develop our curriculum in the normal vocational analysis manner that you employ, I am sure. We involve community advisory committees to the limit. We've developed a very formalized approach in working with advisory committees. If you'd like a copy of the point-by-point procedure we use at our college, I'd be very glad to send a copy. Our system of thoroughly checking out point-by-point all pertinent data, asking them many key questions increases their respect for us. Also, sometimes they are surprised to find that school people are business-like, thorough, and we are "hard to sell"; they are commonly surprised to find out that we expect them to prove to us, with indisputable data, their industrial or business employment need. Without going into detail, our procedure includes a series of 14 steps, and we expect them to complete all the steps or we don't continue to work on their program. I take the position that as the representatives of the Board of Trustees I have the responsibility to recommend (or not) the investing of thousands of dollars in a new program (often equipment of $100,000), the $13,000 annual salary of a teacher, hundreds of square feet floor space. It seems to me that it is only logical that I should be certain that those industrial representatives of the community are equally serious, equally concerned, and involved in a long term program cooperation.

In short, we complete this curriculum research and development procedure, even if it takes a year or more. We find that when we complete this joint process we've made friends

and supporters; we've also got some of their pocket book, a long-term commitment and we've touched bases with the top leaders that count. Very frankly, we've not had (excepting two programs in these 14 years) a single program failure in the day college. Now in developing the night programs we are more pragmatic. Programs come and go rapidly. We suggest by attitude and short cuts--"we can do it for you right now. You've got people employed in your plant that you're complaining about--they can be improved through immediate training. You get your employees to register for this unit of instruction and we will start a program for your industry (not an individual plant) next semester". You know that a one-semester program can be packaged very quickly. The advantage of this approach is that we get a chance to meet a variety of industry and community needs. Often, we find that this semester-by-semester curricula develops until it becomes the essential backbone instructional content for a full-blown day curriculum. It's a good device.

Talking about advisory committees reminds me of Sam Burt, the well-known manpower authority. He is somewhat cynical about the use of advisory committees by vocational educators. Better read his book on the use of advisory committees. He likes to tell a pet story about the kosher martini; he explains that--"you have the martini mixed in the usual fashion and tell the bartender to hang a kosher pickle over the edge of the glass". The punch line is--"you know the pickle doesn't do a thing for the martini but it makes a hell of an improvement in the kosher pickle". Sam Burt is a great respecter of the need for occupational education and trained manpower. He makes a good speech; he might be a good man to pull into your school sometime to stimulate your staff and advisory people.

Our minimum graduation requirements for the Associate Degree are very cut and dried, requiring 60 or more units in an identifiable curriculum and at least 14 units of this in prescribed general courses. At our college we offer both the Associate in Arts and Associate in Science. The division is arbitrary; in general, Associate in Science include the mechanical and technical fields; the Associate in Arts are those majors in literature, art, photography, apparel design and a few others. We require a "C" grade average for graduation, which is above the state minimum of 1.75 grade average. We have philosified at our school that if a student can't be a "C" student (an average student) he might better get out of that field and study something else. We have taken this arbitrary stance, which is a debatable one--but we insist upon that when we put a graduate out into the labor market. We are assured that the employers in the field want our graduates to be at least an average one in that field. So we don't support the idea that any "D" student who slides through school is going to be pushed to somebody's employment office.

We offer vocational certificates as well as Associate Degrees. We're not embarrassed about this. The certificate is granted in an occupational field without including the

required general education pattern involved in the degree pattern. At graduation each June we have the certificate candidates cross the platform with equal dignity, and they also are in robes. We feel that when a person enrolls and completes his occupational goal he is entitled to the respect and dignity he has earned.

We also offer both credit and no-credit courses. This is a novelty program that we are starting in September. A student may elect to take a "credit/no-credit" course as long as it is not a required one in their major. They may not take such a course in their major. The term "credit/no-credit" is a new one for the old-time "pass/fail" term. Perhaps the only unique thing about our procedure is that the teacher doesn't know whether the student is taking it on "credit/no-credit" or for a grade. The student petitions the Admissions Office to take the course for credit/no-credit; up to the 12th week the student may decide whether he wants to take it that way, or for a grade. To meet the requirements of the course, the student does the same work in either event; the teachers don't know which students are enrolled for "credit/no-credit". If a student makes a passing grade he gets the units of credit and if he earned a grade of "A", there's no grade entered on his record. If he failed the course, he gets no credit, so it's really a "pass/fail" system. We think it to be important that the teacher doesn't know which selection has been made by the student. If the teacher knew in advance it could make a difference in the teacher's attitude toward the student. It took a bit of arguing and insistence to get our academic teachers to agree to try it for a two-year trial period.

The evening division program is an educational smorgasbord; we have a much bigger program and a more diversified evening program than we have in the daytime. We conducted over 700 course titles this year in the evening school.

We operate several branch locations. One branch (evening) is in the junior high school, in the Westchester area and about 14 miles from the main college campus. Originally it began as a technical program offered for personnel of aircraft plants. Lately, since employment became stabilized, the need for such technical programs lessened. Whereas, once these technical programs were attended mostly by industry personnel who had baccalaureate degrees in engineering or science, the program now reflects a more diversified enrollment that typifies the community interests. About 60% of the present course offerings are general education or cultural subjects.

Nearby to our Westchester Branch is an extensive and thriving adult school with its many high school subjects, self-improvement, and avocational courses.

One of our newest special programs is a work-study program in cooperation with five local architectural firms. These firms wanted to participate in training disadvantaged persons so they

approached the school. It was suggested to them that if they really want to get involved they should go out and find some hard core people. They contacted a teen post director and he scratched up about 25 young people (all "dropouts") who showed interest in becoming draftsmen or architects. Well, the committee representing the five architectural organizations with one of our drafting teachers culled the group down to about 21 through interviews. Actually, after one year of operation, 10 of these people are still employed (half day) and attend school half day. It now appears that all 10 persons are going to complete the program and get full-time employment. Yes, we lost about 50%. But if you had seen the high school transcripts of those black fellows and some of their other records, you'd be as doubtful as we were at the start. All 21 were "dropouts", and all had transcripts that clearly indicated they were high risks (by most academic standards). But 10 of them are surviving; and I believe that this is a good return on our investment when we get a 50% success on that kind of group. Beyond this, they are going to be the models for others. As these black men get enviable jobs, this fact will start to radiate in the community; it's going to reach out to the far ends of the ghetto community.

Like many colleges, we have a College Basic Skills program that is designed as a remediation opportunity for academic students who do not measure up in the Freshman English examination; nothing new here except that we succeed in getting a larger percentage back on an academic track than most colleges through our tutorial approach.

Starting next fall we will offer for the first time a late afternoon class for high school students. We are going to offer several courses, cultural, remedial and occupational. We hope this may encourage some high school students to come down and take an occupational course or two after school. We also expect to offer a few courses on Saturday morning as an experimental program. We hope these efforts will make it convenient for some adults and young high schoolers to move ahead at the rate they are capable of.

One of our unique services is our library collection. We have such a good technical library that it is reasonably well used by our advisory members and others from local industry. Our collection of technical books is equal to and generally more extensive than most industry organizations have. So, we are having something of a call upon our library services by industry people. This helps our relationship and certainly surprises some industrialists who tend to think that a vocational college has an old-fashioned library filled with dusty books that no one reads. You know the attitude I am describing. It's an eye opener for such misguided industrialists.

All right, I want to continue with more explanations of our curriculum and also talk about our student characteristics. We have an aircraft branch; it is located on an expensive piece of property near the airport and worth perhaps $1,700,000 as

3

a land value. We finally got the advisory committee to declare that we should not move away from site because it's well located and is convenient to thousands of personnel at the airport and nearby plants in the area. We intend to erect a modern, three story building, tear down the old facilities and expand the technical curriculum. This calls for an outlay of about three million dollars. There is nothing unique about our present program. But we do have a good core aircraft training program, and several specialized programs in various mechanical fields, including electronics. This curriculum is very popular with maintenance/service personnel in our airplane transportation business, a major industry in our locality.

Air conditioning is one of our most popular fields. Last week, Friday, I went on business to the air conditioning laboratory. On the wall were posted many unfilled jobs, listed by companies with job descriptions and salary. These jobs paid no less than $650/month, and the average, I estimated to be about $720-725 a month. Here is a good example of a field in which the expectation for employment is high and yet, seemingly the mamas and papas and school counselors imply they don't know it exists. How can people sit in air conditioned rooms, work in air conditioned offices and plants and not be aware that somebody must keep that air conditioning equipment going? We have two teachers in the technician level program and one teacher in the maintenance and service level. The service mechanics are trained to enter the craft; the technicians are trained to maintain plant systems and/or as assistants to designers.

Drafting is another popular cirriculum with out students. And again we have something like 45-50 unfilled jobs in the mechanical drafting field right now in this program at the school.

Placement generally is no problem to us. We had around 1,700 graduates in 1969 (degree and certificates). We had 2,340 companies attempt to recruit these graduates. If you were to multiply these 2,340 companies by 10, you've got an idea of the number of job offerings that were available to graduates at our college this last school year. There is no problem of getting jobs for the skilled graduate from trades, business or technical programs. This is not the problem. Many parents are worried--"will the graduate get a job"? The real problem is to attract young people and adult people who desire to enter into these fields, help counsel them, and to encourage them to stay with the program to its completion. The probability of employment is virtually a one hundred per cent expectancy.

The electrical field is a large occupational craft. It's pretty well tied up by organized unions and apprenticeship. We have good union-school relations; the local unions are very fair to our graduates in the apprenticeship program. These graduates who go to work in Federal, State, County or City

governmental bureaus are not required to join unions and these also are good areas for job placement. As it's a fact that government employment is growing at a faster rate than industrial employment, some of our teachers in vocational education are missing the boat if they do not place some of their graduates in various government bureaus; there are a lot of jobs unfilled in these local and regional agencies.

Electronic instrument calibration is a small but well-paying technician field in our area. An instrument is only accurate when it is regularly calibrated and serviced. With growing emphasis upon quality control in industry--this field will continue to expand.

Electronics represents an increasingly important occupation. We have several programs and at various levels of employment.

A lot of applied math and science is required in these technician fields. We also have communications and a small broadcasting station. And, we have the old reliable TV service training program. Since the advent of color sets you can't train enough of these people.

PBX is a short program of six weeks. This is a traditional field that has been with us 30 years. Pacific Telephone and Telegraph loaned and installed about $60,000 worth of equipment; they also service it, modify it, and put new equipment in as necessary and at no cost to us. We pay only the instructor's salary. They place the graduates. No problem, no strain, we just train.

Annually, we construct a 1,400 square foot model home and sell it by public auction. The carpentry students build these scale models before we build the model home. I get a $10,500 budget arranged to finance the building of this home; afterwards we proceed to sell it to the public. The bids received are for $10,500 to $11,000 so we get our money back. All the carpentry and cabinet work is done by students. We also use the plumbers apprentice classes and the painting apprentices.

Through the construction of this home we not only get the needed instructional production but it's a very attractive home and it reminds the community, the building industry and the crafts people what our students can do. It's another way of actively promoting the image of our departments and our building trades student body.

This is Wilber's Folly--$150,000 dry cleaning plant and only one day class for lack of students. There is no question about the available jobs. But two factors work effectively against recruitment--(1) the social factor--nobody, but nobody except neighborhood women will work at that dry cleaning plant or dry cleaning shop; (2) the pay rate is too low to compete with other occupations. In Los Angeles area alone, there are 700 plant operators--it's a big field with hundreds of jobs

but nobody wants to go to school to learn it. Our plant is modern in every way and offers a complete experience for entry into the field.

This slide shows one of our power sewing training rooms. This curriculum is an old-timer. It comprises two programs; one is six weeks long (basic needles) and the other one which covers specialized needle work machines (three months). Although there is a continuous and large employment possibility--we just run two classes simultaneously year after year. Employment is very volatile. Consequently, if our classes are full, we put the applicants on a waiting list for the next period of instruction rather than add teachers and lay off teachers to reflect the changing economic situation.

Fashion design is one of major training fields today. Los Angeles is second only to New York in the production of apparel. Each year we place 25-30 assistant fashion designers in the west coast of this country. Upon occasion we have placed a few in New York City apparel plants. This is a particularly popular field for the women students. Our curriculum includes every facet of the field. At the end of every school year we have a fashion show known as the Gold Thimble Award. We design an attractive cover for our fashion show program; we invite the homemaking students from the high schools and their teachers and let them preview the fashion show on a Wednesday morning. Professional designers in the field, newspaper fashion editors and editors from the fashion journals, judge the designs in each category. Later, on Friday evening, the winning designs in each fashion category are featured in a fashion show that is open to the parents and public. We call it the Gold Thimble Award because one of the supply companies presents a gold thimble for all first place winners, a silver thimble for all second places, and certificates for third place. As many as two thousand people attend this fashion show.

At this point you may have gotten a picture of our students, their abilities and interests. The ethnic grouping of our student body is most interesting. In our day school fifty per cent of our students are black students; fourteen per cent are Mexican-American; ten per cent are Oriental-American; two per cent are Indian-American; and the remaining twenty-four per cent are other whites. It's a very cosmopolitan group.

The choices of curriculums are interesting. Many black men do not want anything to do with trade training. We seldom get calls from the negro neighborhood areas, or P.T.A.'s to talk about trades or technical fields. Few schools in those areas ask for our counselor to come out and talk to their students, although we get such invitations frequently from other areas of the city. It is as if many blacks are saying "we've already been there". What do such black people want? In talking to many I have the impression that they have

the same status consciousness many white people have--that their boy and their girl must reach for the professions; so it's University of California or bust. And, of course, what results is obvious, hundreds and thousands of scholars are directed to make this try without knowing the kind of stiff competition they are getting into. Take a look at the competition to enter the professions in California, for instance. In California, only 13% of all the occupational workers in our state are categorized by U.S. census as "professionals", meaning four year or longer university degrees are required. Of the total of 13%, school teachers comprise 44%. So, when a youngster is aiming for the "professions", unless he seeks to enter into teaching, he is shooting for only 6% of the labor market. That is a pretty narrow category. Now how do we recruit black students at our college? They, on the average, are of a little higher economic level; some of their parents are professionals; some of their parents or relatives are business people, who have had a little more look around the world, and they are not embarrassed to have their kids in trade or technical education. But the fellow at the very bottom of the economic ladder is not encouraging his children to have anything to do with trades if he can avoid it. This generalization is also true for some elements of Mexican-Americans. The chicano, for example, is not pushing his child to go take a trade. So recruiting is a very interesting proposition with certain groups of Mexican-Americans and some blacks at the lowest economic level.

Some other characteristics of our students, as a group; many come from the socio-economic lower third--others come from the lower part of the middle third and a few from high income levels. We have many Vets; there are about 1,200 veterans in our 5,000 students (24%). A lot of these vets come back who have not earned a high school diploma. That is one reason we leave that door open--these men have learned a lot since they have been in the military service. They are mature men and generally well disciplined. To force these men back into a high school environment would be inexcusable from my point of view.

We know our students well because we continue to study them all the time. We just completed our 1967 survey of our day student characteristics only two weeks ago. We also just completed a study of our evening students recently. We think the evening questionnaire we just completed is a very good one, as one of our deans is finishing his doctorate; this survey is going to be his thesis. Of course, what I am inferentially saying is--how ridiculous it is to build curriculums for business or industrial jobs without ever considering or analyzing the student body which is going to have to learn these jobs. In curriculum development you really have two basic choices--one is to arbitrarily say, "this is the way the field is", nobody can come into this field unless they have meet the requirements of science, calculus, etc. If you assume that's the only way into the curriculum, then you're taking a very academic approach--which may work and with

probably no risk. On the other hand, that system totally ignores the reality of the situation. A curriculum eventually becomes the track for a human effort. So really we don't know enough about our students and their high school records, etc. although we would question the value or the authenticity of some of these high school records. I make the plea to you that you take a new look at the guy at your school for his true abilities and interests and be hopeful as to what he may accomplish in the new environment. It's admittedly a liberal attitude that I am recommending. We lose some people along the way, but most of them find themselves if and when we know enough about them to be helpful. So we seek information about our students all the time as a guide to our planning and evaluation.

I'll give you further facts about our day students: 85% of them in the day school are between 18 and 30 years of age; 52% of them are below 21 years of age; and 16% of them are already divorced or separated. How far away do they live?--62% of them live within five miles, another 30% live within 6 to 10 miles, another 25%, 11-20 miles away. But, obviously, some 90% of the students live within a radius of 10 miles. On this large map of Los Angeles the yellow color indicates the lowest economic group in the city; the blue represents our lowest educational level in the city; and the green, the combination of the lowest education and economic levels. As our college is centered in these yellow, blue and green areas, our students come to us from this immediate radius; so, you understand by color code something of the characteristics of our students in terms of income and something of their socio-economic status.

How do they get to college? They come mostly by auto. We're having increasing problems providing parking space. There is no problem when you're buying an acre for $500; but when an acre costs as much as $200,000 it does become a problem in buying land for parking.

What about employment? 60% are employed, many of them half time and better. And when do they mostly work? The 4-12 a.m. shift is most typical. What are their sources of financial help?--they tell us their parents and the GI Bill of Rights are the two most common sources. Working, of course, is one obvious way for many.

We're always interested in what ways our students learned about Trade-Tech. How did they find this school, hidden as it is in the middle of the downtown area? They answer: (1) the biggest number say they heard about the college from friends associated with the college. This fact tells me loudly and clearly that we'd better have our custodians, clerical staff, technicians, teaching staff, and all of us, very aware of the value of taking the message of our college services out to the community; and apparently we are doing this. Again, the biggest response was "friends associated with the college". (2) From reading pamphlets, papers and

brochures. Fortunately, we publish and circulate a lot of this and apparently the publics are looking at it. (3) "From a high school teacher"; actually it may be the chairman of the high school department. A teacher or chairman is of importance in school relations. Finally, (4) "from the high school counselor". We have found over a period of years that this is quite a reliable pattern of response.

We also ask them a very basic and personal question, "what made you make this key decision?" The typical response--- (1) "the kind of training programs offered". So they enrolled knowing the kinds of available training; (2) talking with industrial/trade teachers at high school; (3) "a visit to the campus with a friend associated with the college"; and (4) "talking with students who have graduated from the college." I suggest that it is vital to ask your students such basic questions. We've learned a lot from our student questionnaires; and as we have learned from their responses, we have worked this information into curriculum development, and into our community PR. I could continue through the whole survey but this much information may be a clue to you, I hope.

Do many students drift in and out of California community colleges? Not so! Some critical individuals charged that many enroll and later drift around from one college to another. However, it's not actually true. We did a survey on the students in our college who had left two or more colleges before they enrolled at Trade-Tech. It turned out to be only 2%-- a very small percentage.

Do students hang around colleges indefinitely, for years, and never finish up? We checked this out too--only 8% of the student body required over four semesters to graduate. So, we are comforted when we can deny such generalities that some publics scatter, or that legislators deliberately deploy, and can correct them with facts and statistics. Another reason I constantly develop this kind of research is that when I petition a congressman, senator or assemblyman, I have need for accurate data.

Our population grouping at night is very different than in the day. In our evening college 63% are white; 7% only are negro; 13% Mexican-American, and about 10% Oriental-American.

We have a unique, and routine student follow-up system. We send friendly, cursory letters to all who enroll and stay one semester and then walks out "incomplete". With this letter we include a short questionnaire; we ask them to give us their reactions to our college. Those who answer our questionnaire tell us some interesting and surprising things. For instance, after completion of one semester, about one out of five tell us they obtained a job. This fact startles us because, as educators, we have the feeling that the student must stay on to the last day of any program to go to work.

But, the research on these "drop-outs" indicates that 20% of them who casually walked out the door successfully entered employment. It's worth reminding ourselves of this. Another interesting fact; about 66% tell us they plan to return to the college. And they also tell us some very critical things about some of the teachers or programs--that's good to know. So we have a system for statistically tabulating the questionnaires. We give the appropriate replies to the chairman of the department and these go by hand to the teacher. Teachers ought to know what some of their students say about their program or teaching performance.

We also have a system of follow-up for the completion students; and this questionnaire is sent about six to seven months after they are graduated. Do not follow-up on your graduates immediately. Their biases are those of a new person in the world. But after six to nine months at work, their biases are more realistic to the occupational environment and also they are more knowledgeable. Based on experience, I suggest that graduate follow-up is a very worthwhile activity and provides information needed by administrators.

We work at PR very seriously at our college--it has a high priority. We try to get every faculty member involved--although some resist it. We seek to find those who like PR activities and who will work at it. But to clarify what I mean when I am talking about PR, I am using the definition of Edward Bernays: "PR is the attempt by information, by persuasion and by adjustment to engineer public support for an activity, a cause, a movement or an institution". I don't know of any better definition. This concept of the importance of engineered"information, persuasion and adjustment"--should not this be taught to every faculty member? No administrator can operate a good college, in my view, without daily practicing these concepts in relationship to his local communities. We as administrators must convey information--we must interpret and persuade--and we must be willing to listen to community feedback and adjust to the feedback.

School public relations--when you can bring it down to its most essential element, is telling the public what happens when the individual learner and the curriculum come together. What happens to the learners in a curriculum? Newspapers want this story; parents want this story; students want this story; high schools want this story--everybody likes this story because it's a human relations story. There's a news story going on every day in each of our colleges, right underneath our nose.

Who are the agents for our public relations? They're all present at our colleges. Your administration, students, teachers, clerical staff, bus drivers, telephone operator, custodians, and there are more. Everybody on your staff is an agent for the PR program of your college and that's the kind of a premise you should work on. I'm not going to try to describe any PR plan. But any plan should, as a minimum, recognize that the community wants an excellent instructional program, they are

interested in it, and they want to participate in the policy of the institution to insure it serves community interests. The publics want to participate in planning and policy--it's their dollars, it's their college; and in a broad sense, we are only their agents for education. I think they have a right to this consideration.

Education-industry relations involves two-way cooperation. It is ridiculous to hold advisory committee meetings and only see to pump out your desired information and not also tune in on their reactions or avoid what they are trying to bring to your attention. And don't forget the importance of individual recognition. Our master advisory breakfast, which we hold annually, is the one way we say "thank you" for the good support of our advisory members. Of our 800 advisory members about 550 accept the invitation for this affair that features a first-rate speaker; we also invite important citizens of the community--judges, civic leaders, politicians, regional P.T.A. offices, etc. They all love the attention and the honor of the invitation.

In this slide you see one member has been on the advisory committee for the apparel industry since 1923. He is sitting at the head table with pride--and don't forget that public image isn't something of importance to him.

We publish a brochure listing all advisory members, by committee and by their business titles. All members receive a copy of this brochure; they like to see their names in print.

Another PR activity is the President's Newsletter published four times a year (twice a semester). This is mailed to selected community leaders (about 2,000) and it also goes to our advisory members. I try to keep these leaders posted on changes, events and new developments. It's structured to keep them acquainted and up-to-date with the college operation and services.

We have received many awards and plaques. One that particularly pleased me was the Los Angeles City Council resolution, with all its fancy script and ribbons attached. The essence of this resolution is to commend Trade-Tech College as "an oasis of beauty in the middle of the central city". Of course, the news press covered this citation that took place at the Council chambers and this gave us a constructive PR exposure.

We enter many kinds of industrial conferences and fairs as a means of publicizing the college to specialized trade association groups. Usually we prepare the booths, they pay for the space. We help put on the Technical Illustration Management Association exhibit at the Los Angeles County Museum--about 400,000 people see this exhibit. Daily, we send to as many as 25-30 newspapers, college-news releases; often, we also plant stories in various publications. At the dedica-

tion of new buildings we have important personages speak and then we plant their speech in major newspapers. The industrial advertising agencies can assist in such arrangements. The public is inclined to believe statements, made in such speeches, in preference to the same stated facts when made by educators. We print up thousands of copies of favorable speeches made by industrialists and circulate them to local high schools.

We work constantly to plant PR items in industrial journals, trade journals and in Corporation house organs. They need copy. Don't overlook the house organs of public agencies or governmental bureaus.

This slide shows our most recent model home. The Sunday edition of the Herald-Examiner newspaper featured a full page story about this student project--and in color. The local gas utility corporation spent $2500 on the art work for the "pass-out" brochure (we did the printing at the college). They also paid for the full page space in the Sunday edition of the Herald-Examiner newspaper, plus $50 government bond to the student naming the model home, plus providing us with a full-time PR man for three months. The public utility wants to sell gas; we want to promote technical education. So, it's to our mutual advantage to "hold hands".

Our "pass-out" brochure includes a list of donors who provide many gifts included in the model home, such as, the air conditioning system, kitchen range, refrigerator and other convenience units that appeal to the prospective buyers.

Each time we dedicate a new building, we try to prepare brochures and/or program materials that are appealing and that tell our story favorably. The completion of new buildings give us the opportunity to dramatize and publicize the departments and the occupational programs housed in the new building.

This new photographic poster represents one of the newest wrinkles in our campus internal communications. Some of our black students are very cynical; even after they complete their registration and attend classes, some of them still raise this question--"I wonder if I really go through this rat race, will I learn this stuff and will I actually get a job?" This kind of skepticism makes it difficult for any student to invest his full energies into his schooling. So, we conceived of this poster idea that clearly features a photo of one of the black graduates now at work in industry. We've taken photos of about 15 of such students and we expect to include every instructional department; then if there is value to this project, we'll start over and do it again. The photographic illustration shows a black man in an important, successful position in industry alongside of his Trade-Tech teacher who taught him. The poster illustrates graduates who have "scored". Next semester we expect to do a series on some of the Mexican-American graduates now in industry. We hope to arouse a feeling on the part of some minority students that..."I guess if <u>he</u> can do it maybe <u>I</u> <u>can</u> <u>do</u> it too". Many minority people

are highly skeptical people and with reasons for their attitude.

And as to student activities, we have a varied program like at most colleges. We have a real lively group. Dances? We have many afternoon dances and several evening affairs. At our Sweetheart Ball, the students come beautifully dressed. The A.S.B. hires the Biltmore, the Century City, or Ambassador Hotels; as many as 500 couples attend these dances. Do vocational students like social activities? You bet they do! Burt Lancaster, and other entertainment stars have presented the crown to our Trade-Tech sweetheart at this annual event.

This slide shows a student club dance--the International Student Ball held at the Ambassador Hotel. All the various national apparel makes this dance a very colorful affair. There is no question that the occupational students desire the same kind of social life that other young persons want. Why not? Vocational students are not anti-social, nor basically unique in interests from others of their generation.

Yes, we have athletics. We belong to the Western States League, a real competitive league. Most often we wind up the sport season in the middle third of the league--but our participants have fun, and get the physical "work-out" they enjoy. We have basketball, track, golf, swimming, cross-country, some Women's Association athletics and also intramurals. We do not have football, or baseball.

Well, I can state with convictions, that we aim to provide each young person that enters our college a good opportunity for social life, good teaching, and for happy memories as he meets and talks to his friends and informally with his teachers. We believe that when he comes to graduation night he should not only graduate with his degree or certificate, but have a feeling of personal achievement, pleasant memories, attained some friends, and possess occupational skills and knowledge. We also hope that he has become aware of himself, his community and the world through his experiences and the general education program. In short, I propose that all of these experiences comprise a good college level occupational program. In my opinion, that's what vocational education is all about.

I wish to close with this personal statement. Each of us builds his own philosophy of life. I have built my own. As I became an administrator, and president, I quickly found out that there is no place "to pass the buck". Prior to this when I was a vocational teacher (for 15 years) life was quite simple; when I became a chairman, the responsibilities became more complex; and when I became a coordinator of a whole vocational area, it got downright sticky. Later as a counselor I saw the students from a totally different point-of-view than I had previously experienced; as an assistant dean the

paper work increased, most of which I didn't like; then, as a dean of instruction I understood for the first time the curriculum as a whole pattern and the inter-relationships of its segments. I am impelled to admit, that my philosophy has changed as I moved from chair to chair and at varied levels of responsibility.

This is my present philosophy for vocational-technical education. I think we have two principal areas of responsibility. First, we must prepare our citizenry through post-high school and community college training programs with (1) the needed occupational skills, (2) increased technical knowledges, (3) job attitudes and (4) increased awareness of themselves, the community and the world. If we don't include all these objectives, we are "short-changing" our constituents and we do not have a complete program. I insist that we must have our students touch all these four bases or they have not scored a--"home-run", to use baseball terminology.

Second, I think we should have the determination to bring about accessibility in education for everyone in our communities. We should not limit our interests to only the high-score, no-risk applicants, but include the whole smorgasbord of society in our local areas. From my overview of Trade-Tech this morning, you can see that I have deliberately attempted to broaden the curriculum to the extent that any young person or adult may apply and find some program in which he can start, if he is willing to cooperate a little. My personal philosophy and the social aims of my college are beautifully stated in a poem that I have carried in my wallet for perhaps 16 or 17 years. It's a very simple statement but it has always had a profound meaning to me -- "The parish priest of Austerity, climbed up in a high church steeple to be nearer God, so that he might hand this word down to his people; In his age, God said, 'Come down and die', And he cried from the steeple, 'Where art Thou, Lord', and the Lord replied, 'Down here among my people'." This is what I'm trying to say about vocational-technical education. The community colleges should be concerned for the educational needs "down here among the people".

Now for my closing statement I wish to repeat the stimulating and far-sighted statement made by the superintendent of a large midwest city back in 1963. The statement, selected from a speech to vocational educators, is particularly appropriate today. He said, "The challenge today is not a challenge of one program as against another; it is the challenge of the total magnitude of our educational needs. The educational challenge is a total challenge to our way of life...The great truth is that the broader the base of education the more education all will have. The broader the base of wealth the more wealth there is for all. The truth is, the greater the opportunity for each, the more achievement is possible for all. To infringe the right of any one person is to compromise the rights of all. It is America's spirit that is challenged and America's spirit that is the issue". And he concludes:

"Will we meet this challenge? WILL WE? We had better, or there will be no future for anyone--not for anyone at all.

Thank you very much.

QUESTIONS AND ANSWERS

F. Parker Wilber, President
Los Angeles Trade and Technical College

Question: How is the school staffed; and how is money obtained from industry?

Faculty staffing is a shared responsibility of the chairman (or coordinator) of the instructional department and the dean of instruction. We assume that good teaching staff, experienced in teaching, and who have made a successful adjustment to teaching, contribute a valid point of view that is useful in recruitment and selection of teachers. So, first of all, we ask our faculty to make nominations. I have found that where instructional departments have good morale, some of the finest nominations come directly from such groups. They tend to nominate people they know in the field by virtue of reputation, or individuals with whom they are personally acquainted, often through employment in the field. In fact, that's how I entered teaching. I was working in an advertising agency and I had never heard of the school. I received a phone call from the college inquiring if I was interested in becoming a teacher. It turned out that an individual who had the desk next to me for five years in industry had nominated me to the school's administrator. Consequently, I became a vocational instructor.

We also use a second resource, one that is immediately available to us at the college. The high school is changing curricula frequently and this causes many new teachers to be assigned intermittently; also our evening programs are extensive and we require constantly a big staff of over 500 part-time teachers. Mostly, they are employed in business or industry. Many of these individuals are wondering if they would like to enter teaching as a full-time occupation. As an individual, he is expert in some technical field, he teachs for us part-time, and he has an "itch" to pass on his knowledge through teaching it to others. In the meantime we have the chance to check on his qualities, supervise him, and become well acquainted. On the basis of our experience, we find that the part-time evening teachers are one of our finest sources of teacher recruitment. Also there is virtually no risk in their employment.

Our third source is obvious; we insist that advisory committee members have a joint responsibility to help us locate prospective qualified people. They are helpful. In the process of developing a new curriculum with the advice of an advisory curriculum committee (a sub-unit committee) we give them as much as a year's notice that we expect them to provide us with at least one acceptable nomination from the field. You would be surprised how they get out and scratch, and the excellent nominations they make to us.

So, from these primary sources, we get leads. Now, who makes the decision? We charge the chairman or the coordinator with the responsibility of nominating to the administration the best two or three choices. He, with the dean of instruction, evaluates these nominations. They also jointly conduct final interviews. I do not personally select any instructional candidate for the college--it's done by the department with limited steering and assistance from the administration.

Your second question deals with money funds and/or equipment from industry. Part of our success in this is due to the fact that we face it squarely in our earliest relationships with an industry group as we consider justification of the curriculum. We proceed through an orderly procedure of job analysis, outline of curriculum content, estimating equipment needs, etc. Then we test their sincerity, professionalism, control and impact on their own occupational field that these people always purport they have. Some administrator must say very candidly, "we may have to start your programs as a part-time program at night for lack of budget. We will need to borrow equipment from your industry and move it in and out. We'll provide the space, we'll pay the teacher-but you've got to provide the laboratory or shop equipment - if we are to get started". They must also be warned that if and when the program is established in the day, the industry may have to provide the equipment for the first year program, temporarily at least. I do this personally or my dean of instruction does this. I believe that it is an obligation of the top man or dean of instruction, to say to the industry representatives, "eyeball to eyeball", "we are convinced of your industry need, the appropriateness and the budget justification; we will recommend this package to the Board of Trustees, but you must be willing to come through for a real big lift in respect to equipment". I don't find this to be very difficult and this has become a commonplace experience. I wish somebody had told me about the value of this technique many years ago, because I now find that the more I promote the more I get. Some educators think that if a college accepts loans and gifts that it is "bought and paid for by this cooperating industry". I don't feel any obligation. I propose that it offers a mutual advantage and it's a sharing proposition. Industry has no responsibility for supervision or management--that's my administrative authority; and I don't find this to be an awkward relationship.

QUESTION: I thought I heard President Wilber make the very emphatic statement that black people, black students, did not want trade or technical training, and I'd like to know how he arrived at that conclusion.

It's a very fair question and it points up that one should never lean on a generalization. Of course, my generalization was not wholly true. Maybe, I could say it better by restating

my observations. In the immediate area of my college, at this time, many black parents who have young people in high school feel and anticipate that their young persons will not only complete high school, but continue on to the university or college; and these parents, hopefully, entertain the notion that their children will enter "white collar" employment and the professions. Based on that position, many black parents have told me, in reference to trades..."we've already been there"; meaning, I think, a cook, an auto mechanic, or some tradesman. Some say, "Look at the level of job I've got; I want my son or my daughter to come higher in American society". Inferentially they may be saying, (you see, I'm generalizing again)"we don't want the black people to be the lowest economic level in this country anymore". And what's wrong with that economic aspiration? So, as far as I'm concerned, I believe that they should be encouraged - not discouraged - in this ambition for their youth. I do not try to persuade a black parent or a black group away from this notion. All parents, black or white, should aspire for their own children to go as far in this world as they can with their intelligence and ability--what's wrong with that? But, I have said to many black groups, (and to other groups) that what happens inevitably is that many young people find out for themselves the tough academic competition, the rigid barriers of admissions to college, the large "washout" process in universities; that many of these young people will decide upon the basis of their own interests and inclinations not to go to a university; they will find their way into trades and technical fields. And the proof that many do this is that some 50% of our student body in the daytime, and a goodly percentage at night are black people, the majority of whom are learning to become competent in trades and technical fields. Interestingly of that 50% in the daytime student body, almost half of them are studying business administration, business data processing and clerical fields. The only departments at my college that are 80% comprised of black students are these departments. Does that clarify it a little bit?

QUESTION: Black students have not been sold on technical training. Black workers have been consistently refused in technical trades by the industry itself. They have been excluded exclusively from Unions - Union activity; they have not been in the training mainstream of this area, and a good example is this conference that is coming from across the country - we do not have a black face here but mine. I give a little color to this conference. I came only accidentally. I was due to come--he begged me to come. We have relatively few persons who have admitted to training black people; white people can't sell black students this kind of business. You've got to get some black trainees, and some black teachers in the trades. The other obstacle is the counselors, your guidance counselors, high school counselors invariably are white and do not relate to

black students. I addressed a group, some 75 high school counselors in a certain area in Connecticut-highly industralized--maybe as high as 15-20% black population and every counselor was white. I think there are some of other answers and I don't like the generalization and I think you had better look elsewhere for the reason why they are not going into technical areas.

I would suggest the notion that what you said and what I said are not mutually exclusive; and what you said (as a generalization) I know to be frequently true. I may say this. In the Los Angeles Junior College district there is a new Community college--it's located in what is called a black "ghetto" area. It hasn't included a single trade vocational program in its curriculum. It does have business education, secretarial work, etc. The fact that trades and technical programs were deliberately deleted may not necessarily be reflective of interests of all the parents of the community, but the leadership group of community people in this black ghetto who comprise the advisory committee to the Board of Education and to this college, completely rejected any planning for trade or technical fields. In time, they may be proven to be wrong. I'm indicating that there are various reasons for the lack of interest on the part of many black people towards trade education. Also, I wouldn't argue about the merit of your point that more black people should be in union crafts, counseling and enrolled as trade students; it's well taken.

QUESTION: Dr. Saavedra has raised the question as to how the supervision is maintained during the day and evening divisions.

Supervision is vital to maintaining quality in education and specifically in occupational education. At Trade-Tech there are 18 departments, 14 of which are occupational. For every department, we have a coordinator who is responsible for the instructional operation of that department in all respects. The coordinator is responsible for the supervision of his department, for keeping the curriculum up-to-date; and he also participates as a member of the faculty curriculum committee. He teaches very little in the classroom if he has a large department; some have a load as light as three hours a week. What does he do then? He is deliberately free to supervise, to assist teachers, to recruit new personnel, to promote, and to generally work for the good of that department, both in the field and at school. They are assigned 35 hours per week and receive a salary differential for these responsibilities. He also has responsibility to supervise classes in his curricular area in the evening college. For this extra duty he is paid additionally. The same coordinator is responsible for his programs or curriculum, day and night. He is responsible for all personnel hiring, day and night. We hope this brings about a unity between day and night.

For apprenticeship we have specialists--three of them who coordinate in the field, attend joint apprenticeship committee meetings and work with specific apprenticeship crafts. Does that information help you?

QUESTION: Mr. Smythe of Wisconsin. You mentioned the trend that I believe at your institution of contraction of the number of centers that you have down into the central community. Our Milwaukee school, a similar institution to yours, has experienced some difficulty, I think in my opinion, of attracting students from the suburban areas of the community into the central unit and are considering the expansion of centralizing the area, in other words, a feeling that they should take the education to the people rather than wait for the people to come to the education. Do you have a reason for that contraction? And am I right in assuming that it is happening in your institution?

You are referring to the fact that I stated that at one time we had as many as 14 branches and now we're down to five locations. Our school has gone through a history of outgrowing one centralized location, orginally a ten-story building. In 1938 I was the first department chairman to move out into a branch location (in an elementary school building) about six blocks from the main campus. In the following years other departments moved out as the institution grew. When I later became president, and based on my observations, I felt it was very difficult to keep faculty morale high in sub-units isolated from the mainstream of the organization. Also, the sub-unit faculty tends to get mostly concerned about themselves and their little sub-unit; they can easily lose touch with the concerns of the whole of the college. Also, in the branch locations, too often the students are deprived of the opportunity to mix with students of other departments and participate in general activities of the college. They're apt to become isolated socially, culturally and occupationally.

Consequently, from this viewpoint I feel that it is a desirable aim to, hopefully, get the college together on one campus. In other words, on one campus, all kinds of people, from all kinds of social levels, various kinds of occupations and numerous backgrounds or interests would learn to mix and live together. We consequently might learn how universal our needs and concerns are and that we are more alike than different as individuals.

Branch operations are also generally costly--sit down and appraise the financial figures. From the viewpoint of economy one cannot ignore the need to consolidate and operate on one campus.

Perhaps there is a better general answer. In our district there are eight colleges. As these colleges are well distributed

by location in my opinion, they should be encouraged to pick up interest in developing programs of occupational education. If I am a bit of a dreamer, then go along with my dream. I'd like to hope that everyone of the eight colleges in Los Angeles would become more vitally concerned for preparing students for employment and offer a wider diversification of training programs at their college. If I reach out and keep putting up new branches, I believe that I may discourage a rational distribution of vocational education at community colleges in our district. That is my general answer.

QUESTION: I noticed in the films, several persons in training for PBX operators and dry cleaning. Are these certificate programs or are they degree programs?

They are both examples of certificate programs.

QUESTION: Mr. Wright of Vermont. How would you pay part-time instructional help, and secondly, if you run programs for specific industries how were these handled, financed, funded, what are the arrangements?

I believe there are two questions; one concerns pay for part-time teaching staff. The salary rate is about $10 an hour, flat rate. If you teach three hours per evening you get $30 approximately. The salary is not a percentage of the regular monthly teacher's salary. If our regular teachers stay over and teach late afternoon, evening classes or Saturday extra classes, they are paid at the same flat hourly rate. The rate is a uniform rate whether a person is hired externally or internally.

The second question deals with programs for specialized, industrial groups. If we have the satisfactory facility, it's logical for us to do it in our own facility. We prefer to do it on campus--as we can supervise it better and it's more convenient for us. We do have programs conducted for industries which are conducted in our facility; we simply tailor the program around the special needs of the industry. We hire an industrial person as the teacher, we pay them the hourly flat rate salary (our salary) and we furnish the facility. The curriculum development is a joint enterprise. If special equipment is required for the program, I'd anticipate they're going to cooperate by hauling it in and we're going to install it on the floor temporarily. They will haul it away when the course is completed. We do this all the time. Many thousands of dollars of equipment move in and out of our college every year. Now, there are instances where we don't have a lab, like, for instance that of our Bureau of Power and Light. We couldn't and we don't want to duplicate their lab. It is better to offer the class at their location, in this case where there is a need for a small number of people to re-train every year. The Bureau of Power and Light labs and equipment are most adequate; through a lease arrangement, we pay a dollar

a year. It's as simple as that. Under similar circumstances we've used IBM facilities and those of many other companies. It would be economically indefensible to duplicate such industrial facilities.

QUESTION: Are these industrial courses open courses?

Yes; we don't offer any Trade-Tech course that is not fully open to all qualified people. That's right.

QUESTION: I wonder if you would tell us about some of the placement techniques that you use in the various occupational programs. The question has to do with the placement opportunities as far as these programs are concerned and some of the problems that arise with reference to placement. Placement in programs--on the job.

I think you may be referring to the services of our counseling and advisement center. This is a large operation. The first, and most important thing I'm going to say about our occupational counseling is this. We're not interested in screening out anybody at our college--we're interested in screening people into programs at our college. We have a fairly sophisticated aptitude testing program for identifying occupational aptitudes, one which is somewhat unique. About 15 years ago we started to consider the question 'how can we screen people into an occupational slot in which they can predictably succeed?' That's a basic question in vocational education that we must meet. As you well know, high school transcripts often do not reveal occupational aptitudes nor are they reliable enough to be useful in placing students in vocational or technical fields. These transcripts can be very misleading; for instance, we don't know for sure what grade patterns mean in any given high school. Does a 'B' at Dorsey High mean the same thing in the subject as a 'B' at Jefferson High or a high school in Beverly Hills? Moreover, how much was the student motivated, etc. You know darn well the grades don't measure this accurately! In my view, the grade point average in academic subjects of a high school transcript has little significance in terms of predicting occupational potential or competence. More than that, it doesn't give us a realistic index of specific occupational aptitudes, in most cases. So, what we have done is to set up our own aptitude criteria and tests. We leaned toward the tests utilized by the U.S. Labor Department in their employment offices. We hired two researchers for a period of several years to set up our tests, and we still have one employed full-time in this testing research. Our effort is to locate aptitudes that are primary ones to achievement in a given occupational field. So, we started with as many as 20 or more factors in our original test batteries, and then scientifically we reduced these in number to those that are the most predictive ones. We don't deny anybody entrance while we are doing this research. In the meanwhile we test applicants, analyze test

items, follow up on the students' occupational grade in vocational studies. We continue to research this input data, review, cut down the number of test elements until we finally include only test elements that predict reasonably well. What we're really attempting, you see, is to predict the vocational instructor's grade pattern in an occupational subject area one or two years in advance.

We try, through testing to put every person into an occupational field we are reasonably confident he can succeed in. We have reason to believe we are doing this very well in certain trade curricula. One of the new faculty members once said to me as we went down the hall, "Wilber, it's the darnedest thing how every person in my class can probably succeed; how does this happen?" It happens because of our testing research and because every day school applicant is interviewed personally by a teacher from the department and a counselor who interprets the significance of the applicants' tests scores. Sometimes, unfortunately, our test scores are not too meaningful. Some candidates may say quite frankly, "I really don't care about this occupation, but my Uncle Harry says this is a helluva' good field and I ought to get into it". One of the purposes of the interview is to evaluate the attitudes and the genuine interests of the candidate with relationship to his proposed enrollment. Many times candidates ask for admittance into programs that are in conflict with their own motivations or interests. So, the interview procedure is terribly important. After enrollment, each student is followed through in his department, by one of the counselors from the center who is assigned to an instructional department where he spends a full day, every week, checking on student progress or problems. At the start of each semester these counselors go and visit new students, probationary students, or students with border line scores; he talks to students who the teacher feels are having difficulties. This system seems to be an effective one for us.

Now this may interest you also, I stated that we don't intentionally screen anyone out - we don't. We have two categories of vocational programs. Our regular occupational programs have been well established for many years and we have tried to make them as sound as we can. They have earned, over a period of years, an excellent reputation. About four years ago we introduced a new pattern or category, to accommodate those people who have made low or poor test scores. In this new type program we admit individuals who cannot qualify otherwise and are admitted at a different occupational level. This new program includes remediation courses in English, Math, and 10 hours a week of lower level occupational orientation, training and experiences. These programs are one semester only. It is experimental pattern and is approached uniquely by various trade departments. All students in the program are on official "probation". They may transfer after one semester to another program when counseled and approved. As a generalization, the results of these programs seems to be (1) about

one-third of the students learn enough in one semester to qualify for the regular vocational program without further examination and on the recommendation of their instructor; (2) if there is doubt about his readiness for entering the regular vocational program, he may retake the examination and qualify; (3) some students decide that the field is not what they thought it to be. You know, nursing appears very humanitarian and glamorous to a girl until she realizes she is required to clean bed pans. One of the objectives of this new program is to enable students to obtain occupational insights about a field they may never have thought about; consequently, some of them go voluntarily to the guidance center and request counseling for something else; (4) and surprisingly, almost a third are able to obtain a job after the completion of one semester. So I repeat, we are trying to screen people into the college, place them in programs where we have some assura-ce that they can succeed, give them something they can hopefully reach and help them build one successful experience in to another. If you get out to Los Angeles, I invite you to see our counseling and guidance center; we've twelve full-time counselors assigned to this important work. Did I answer the question?

QUESTION: Mr. Hernandez, California Community Colleges. Colleges in the metropolitan area sometimes have difficulty in establishing new programs, because industry would rather work with experienced and older institutions. Do you find that because you are part of a district that encompasses these colleges that your Superintendent will sometimes dictate or encourage you to release programs? Have you had occasion to release programs with the intent of possibly transferring programs from your college to help and to balance the curriculum at a newly established college?

Ray, I can't recall a single instance that is exactly like you are describing. You know that we do have eight colleges in our district; some well-established, like City College or Trade-Tech; some colleges which are new and striving. The only instance I recall where this was attempted didn't carry through to completion because the advisory committee of the college (from whom the program was to be transferred) rose up in indignation. They took the position that at the present college they knew what they were getting and they were not sure what they might get at another college. So they sent to the superintendent's office and made an appeal for status quo. The superintendent, understanding their feelings, backed off from the decision. I don't know if that proposal was a right or wrong one. Advisory committees build up a certain feeling of institutional loyalty.

What we do try to do is to keep some order in the development of vocational education in our system of eight colleges. We each have to prepare a ten year projection of anticipated

programs and facilities. So, obviously if we are to commit ourselves to such a projection we had better plan not to overlap in vocational education with a close-by college. Historically, City College and Trade-Tech have always avoided this kind of curricular conflict. We must look ahead in a sensible fashion and plan for vocational education without dilution of programs or competition with neighboring colleges.

Your question deals with the problem of how do you get a new college on its feet with occupational programs when it has no facility, or it does not have the experienced personnel to promote vocational education. If I were the superintendent (I'll play God for a minute), I would employ a full-time, aggressive man to work on the promotion of vocational education at each new college. He would have no other jobs than curriculum development and community public relations. Primarily, it takes promotional time, cooperative effort, and a conviction about the importance of vocational education. The new president, in the meantime, is so busy with campus planning, hiring new personnel, and getting the catalogs published, etc., that he is unsure of the community readiness or need for occupational education. Too often, he has no personal commitment to vocational education. However, if he had a knowledgeable administrator assigned to his staff for a year or two, his college would probably establish an occupational program. I really believe this. I am certain that I could take any one of my deans who have vocational experience, assign them in any college of our district and in a year or less time there would be cooperative commitments of industry and business to that college and vocational programs would be in the process of being established. It's mostly a "promotion" job. The State Department might give this concept some consideration. Why not a specialist loaner from the S.D.E. and assigned to a college or a district?

QUESTION: Fred Otto, Maryland. At the beginning of your presentation, you discussed the organizational structure of your higher education in California and you mentioned some of the pertinent factors throughout the state that would affect programs. May I ask what proportion of the 90-100 Community Colleges in California would be university oriented or if not transfer oriented exclusively, are comprehensive Community Colleges? The problems of articulation between the junior college and the upper division colleges and the unique problems with reference to this articulation?

I may have to lean on you, Ray Hernandez for checking me as to how many of the Community Colleges (public colleges) are comprehensive; I believe that they all are somewhat comprehensive , without exception. Am I right? No "stated" exception out of 81? In theory, all claim to be comprehensive. We know that some have only a little tiny showing of vocational educa-

tion. Yes, some colleges are mostly oriented to the mission of the "transfer" program and student. However, there is one revealing, recent statistic that I do know--between 35% and 40% of all the full-time students in Community Colleges in California are enrolled in some kind of an non-baccalaureate occupational program. It follows that if about 40% of these students are commited to an occupational goal, then most colleges are indeed quite comprehensive. Of course something like 60% are saying "on to U.C. or California State College or a private college, or else". Another meaningful California statistic is that only 24% of those who graduate from community colleges with their A.A. degrees transfer directly to universities. Is that correct, Ray? Then it is only 24%? The majority obviously are not "transferring" from Community Colleges to four-year institutions at least at the time of graduation.

I believe that your second question dealt with articulation. Thanks to the support of the State Department, the new Board of Governors and liaison committees, we've got remarkably good articulation in California between the University of California, State Colleges and our Community Colleges. Much of this is due to the leadership of men like John Lombardi of the Community Colleges who chaired a liaison committee with University of California for many years. The University of California has done a number of studies that show conclusively that California Junior College graduates do as well or better than the native students of the university. That research takes care of the subject in general terms. Their newer U.C. studies continue to show this pattern; so, in California, educators are not about to argue the academic merits of the Community College transfer student if he meets the transfer pattern requirements.

In regard to articulation with the State Colleges, the Community Colleges have had very good relations. Only during this last year we reached an articulation agreement (statewide system) that they will accept from California Community Colleges, carte blance, --32 of the 40-45 of the required general education pattern included in the lower division--no questions asked. In other words, if we list on the student's transcript as successfully completed and by proper areas of concentration, these 32 college level general education courses are fully transferable without further evaluation. We no longer have to imitate the exact course descriptions nor content of general education courses of the State College system. Of course those remaining units between 32 and 40-45 required at a given State College are subject to their admissions office or their departmental decision. If a person intends to transfer and has not met these additional course requirements, he could be caught short.

It was my privilege to be a member of a State articulation committee for several years. It takes much time and patience to reach articulation agreements. As a summary generalization I can say that we have few problems with State Colleges;

but our students have serious problems in the patterns required by the University of California because everyone of their colleges on each campus has somewhat unique patterns. As a result of this variation, if a youngster doesn't aim for a specific University of California campus, and prepare for the exact requirements of a specific college on that campus, he's "not going to get there from here".

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

STUDY GROUP A REPORT

Leader: Professor Felician F. Foltman
N.Y.S. School of Industrial & Labor Relations
Cornell University

Recorder: Richard McCormack, Chairman
Business Management Division
Agricultural & Technical College, Delhi

The assigned mission of this study session was twofold: (1) to learn to make manpower projections and develop techniques for making occupational surveys for program planning, and (2) develop techniques for determining sufficient potential student population for the support of new programs. It is probably redundant to observe that the accomplishment of these objectives in a matter of ten or twelve hours was an impossible assignment. Most participants would agree, however, that considerable progress was made towards understanding the problems related to surveys; a necessary preliminary to more effective instruction and educational administration. It also should be noted that permission was granted to stray away from a discussion of assigned objectives whenever, in the judgement of the study leader, matters of substance and general relevance were broached.

What follows is a chronological account of study group deliberations, conclusions reached and of occasional inputs from the study group leader. Following accepted pedagogical practice the group was given an opportunity to discuss, from their viewpoint, a great variety of questions that were related to study group objectives even though these did not always relate to surveys and forecasts. Thus, for example, the group displayed considerable interest in the evolution of state supported higher education in New York State.

One of the first questions discussed pertained to the types of occupational and labor market changes which have occurred or are occurring. It was agreed that there is a shift to government and service sectors of our economy away from agriculture; that more women are interested in training and

employment today than ever before; that persistent manpower shortages seem to be a way of life, and that there is considerable mobility in our work force but it also was noted that the majority of community college graduates tend to remain relatively close to their original homes. There seems to be some confusion among some members of the group concerning the rate at which the percentage of professional-technical occupations in our work force was growing. Reference to the Presidential Manpower Report reminded all that there is growth in this sector but that about one-half of all the required occupations today can be classified as unskilled or barely skilled.

The conclusion was quickly reached that available manpower surveys left something to be desired. They were too general, inaccurate, or in some cases they completely overlooked important local developments. In planning educational programs there is no public source of local labor market information except the local employment service office. It would appear from our discussion that the mandated cooperation in V.E.A. between the E.S. and educators is still more hope than reality. There were few defenders of the services offered by the local employment office.

We focused on assumptions, philosophy and objectives of vocational education in post-secondary educational institutions. How general - how specific should the training be? Should schools provide local employers with trained manpower which can be immediately and productively utilized? Should consideration be given to career ladders rather than merely training for entry positions? How much of an investment should employers be willing to make in their training programs? Are schools properly informing prospective students of available programs? And with respect to these and similar questions can useful answers be obtained from surveys or field studies? Naturally, no final resolution was made of these types of programs. Some consensus was obtained to the effect that vocational education, if it is to serve the interests of job seekers and employers must be closely attuned not only to the local labor market but to broader labor markets as well. But little or no agreement was reached as to whether to train for specific narrowly conceived occupations or more broadly. By the same token little agreement was reached as to whether to encourage mobility. Nevertheless, it was considered to be fruitful to raise the somewhat hoary questions for yet another inspection of them.

With respect to manpower surveys and projections we review the state of the art. Time was devoted to a consideration of what types of labor market and other information are required, at the optimum, in developing institutions or programs. At the optimum the occupational education administrator needs to have specific and valid data about the following:

A. Jobs - Labor Market - Employers (Demand Factors)
   Numbers now employed by industry

Projected employment by industry
Job Descriptions
Skills required in Technician level and skilled occupations and knowledge of pay, benefits and working conditions, location
Experience Required
Promotion and Upgrading Possibilities
Employer Training programs and training plans
Organized labor attitudes and requirements
Licensing requirements
Apprenticeship programs
Seasonality of employment
Understanding re hiring of graduates

Students and Potential Students

Interest, attitudes
Numbers in programs

The Future

Technological Developments and Trends
Anticipated Social Changes

In discussing the derivation of these or similar data that are required for planning purposes it was pointed out that the validity, reliability and costs of these data are three criteria that must be carefully assessed. Much general information is available in census data, union sources, from trade associations, economic planners and from numerous governmental sources such as the Bureau of Labor Statistics and the Bureau of Employment Security.

Knowing what data were required and knowing what data were available led, in proper logical order to an examination of survey theory and technique. In planning for or condusting surveys, whether large scale and "scientific" or modest even formal, certain considerations must be taken into account by survey planners whoever they are. Following the chronology from genesis to completion survey planners can usefully follow the check points included below:

(1) Objectives: When directing any complex human activity many people, relationships and interactions it is imperative that objectives, goals, purposes be clear, specific and attainable. In surveys it is obviously necessary to decide on what one needs to obtain. Typically, manpower or employer surveys seek to determine: numbers of people employed in selected occupations; demand for selected occupations; jobs for which training is needed; interests and attitudes of employers, unions, parents and students; needs for supplemental training; training requirements; employer interests in cooperating with educational institutions.

Objectives need to be clarified for each type of curvey including: (a) Employer (Demand) studies, (b) Student and Parent Interest - Attitude Studies and (c) Follow-up Surveys.

(2) Sponsorship - Direction - Management of Surveys

-Will study be conducted exclusively by school personnel or in cooperation with employment services, employment associations, chambers of commerce or professional associations?
-Will there be a special coordinating group?
-Should there be established an ad hoc advisory committee?
-Full time director and staff?
-Budget?
-Who has names and addresses of target population? Cost of obtaining?
-How will respondent cooperation be elicited?

(3) Sampling and Data Collection Considerations

-Which target populations? Universe?
-What geographic - labor market boundaries?
-What is the correct source of information within an employing establishment?
-How to insure validity and reliability of data?
-How to minimize communication difficulties? (For example, it was emphasized that instructions to respondents be carefully tested in advance)
-Sampling or No and if we sample will we simply randomize or stratify? For example, BES area skill surveys usually are stratified samples in which all large employers are included.
10% of medium size (25 to 250 employers are included)
50% of small size (25 or under) employers are included)
And to draw a sample one must have specific information about the total universe.
-Will it be a mailed questionnaire, interview with questionnaire, open ended interview or telephone interview?
-How will you track down non respondents?
-How to follow-up and when?
-Who can pave the way so as to elicit sound information?
-If you use interviewers are you prepared to train them so as to insure consistency and uniformity in data collection?
-Time Tables - Deadlines

Questionnaires

-Open ended or objective types
-Pre-coded or not

-Length and detail (Is each and every question absolutely necessary?)
-Anonymous or no
-Instructions
-Prepare tables for your final report <u>while</u> you are developing the questionnaire
-Is language appropriate for respondent? (Style, use of jargon, clarity)
-Controversial subject matter - How should you treat it?

(4) <u>Analysis</u> - <u>Publishing</u> - <u>Action</u>

- Editing
- Coding
- Tabulating
- Analyzing
- Writing the report
  (a) Technical report
  (b) Popular versions
- Publicity - realeasing data
- Decision-making

Surveys can be expensive if conducted on the scientific basis suggested in the above check list. But the group recognized that in the absence of necessary financial resources it would still be possible to survey on some less than optimal basis. Even if compromises have to be made it is still desirable to follow as much of the above format as possible.

To further clarify survey procedure the group discussed the area studies conducted by New York State in 1963, 1964 and 1965 as a case study. Questionnaire instruments from several of the local area studies were examined with the view of learning more about techniques of questionnaire construction, survey technique and reporting results of studies. The twenty-four are studies conducted by New York State are particularly interesting to students of survey methodology since the state permitted great variations in these studies. Some of these studies simply asked employers rather naive questions while others used the most sophisticated techniques. In the final analysis the decision to expand vocational education programs came not from the employer requirements data but usually came from demonstrated interest of high school students and parents in additional occupational education.

Relatively little time was available for a thorough examination of the second objective pertaining to whether or not there is sufficient potential student population for the support of new programs. Having duly entered this caveat it is useful to observe that new institutions evolve in many different ways in various states. With only a handful of states represented in the study group it quickly became apparent that institution building is not a science - instead it is politics, judgement, and occasionally logical analysis. Consider the following:

Ohio - Area vocational centers, technical institutes or junior colleges are located on the basis of population within a specific geographic locale, i.e., 100,000 population within a 35 mile geographical radius.

Iowa - As far as we could ascertain decisions on locations are legislative decisions with no known guidelines.

New York State - Community Colleges require an assessed valuation of $150,000,000 in a geographical area with predicted enrollment of 500 within 5 years. The "charge back" policy appears to have a possible end result of forcing the creation of a new unit. "Charge back" allows 1/3 of total tuition with a limit of $400 and certain prorated capital charges to the students' resident community.

Illinois - State supports 50% of operating costs and 75% of capital costs.

Connecticut - Based upon a survey of State Office of Employment Security. Institutions are established in areas of high technical employment. New plan calls for establishment of shared facilities consisting of a technical college, community college and a two-year liberal arts unit of University of Connecticut.

Missouri - Feasibility study with Advisory Committee, high school survey, industry survey and college survey.

Of particular importance in developing new programs are certain criteria of feasibility and practicality. New programs like new institutions, must meet certain tests. To insure feasibility it was suggested that: (1) an ad hoc advisory committee might be appointed to begin the exploration of feasibility, (2) employers be surveyed to determine job vacancies, skills required and potential demand, (3) costs be projected, (4) teacher availability be analyzed, (5) student potential and interest be explored and (6) facilities and sites be detailed.

In spite of the best laid plans things do sometimes go awry. Members of the group candidly noted that some programs failed presumably even though feasibility studies has been carried out. It was noted, for example, that occupational training for the public sector failed in one case (policemen) when insufficient numbers of students could be found. And in another case a teacher aide training program was cancelled because local school districts couldn't find the money to hire such aides.

The very last part of the workshop was converted by professional prerogative to a lecture on the state of the art of

manpower prediction or forecasting. Behind this decision lay two facts: (1) an expressed interest on the part of the study group in learning more about forecasting and (2) the workshop leader's conviction that vocational educators should be more effective and knowledgeable consumers of predictions and of manpower data generally.

Man has always been interested in speculating about the future, but why is there so much interest today in employment and manpower forecasts? The answer can be found in our rapid and accelerating technological and social shanges. Planning educational programs, particularly occupationally oriented programs requires accurate estimates of future needs. By the same token vocational guidance would be even less effective than it is if there were no projections of future occupational trends. Apart from educational needs the impetus for more and better forecasts comes from our public policies, particularly those related to full employment. If we are to provide jobs for all those interested in and available for work uncertainties about the future must be reduced. For these and similar reasons manpower projections are burgeoning from the pens and computers of government officals as well as from private persons.

Without being unduly pedantic it is necessary to understand the forecaster's jargon. He talks, for example, of projections or forecasts. What are the differences? In each case the professional analyst states his assumptions; examines relationships; obtains specific information about the variables he thinks important' after which he states what he thinks will occur several years hence. If he predicts or projects he goes through all of these steps but hedges his prediction or projection as being valid for only so long or as far as his stated assumptions continue to be valid. A forecast, by contrast uses exactly the same methodology as the prediction but then states unequivocally this is what <u>will happen</u> a number of months or years hence.

Projections and forecasts are dichotomized further into <u>descriptive</u> or <u>normative</u> reports. A descriptive report (projection or forecast) states conclusions as to what is likely to happen, but usually leaves to others the task of finding implications. A normative projection or forecast is published in order to try to establish what <u>ought</u> to be. So we find quite frequently that predictions or forecasts about the number of teachers or doctors or social workers are stated as a figure we ought to have in order to maintain a certain level of service.

How is the forecast made? Since the forecaster is trying to anticipate and to specify the future he usually starts by making a series of assumptions concerning the major characteristics or dimensions of the future as he sees it. He will, for example, assume: that there will be no major disaster; no major political or social revolution; the war will escalate or de-escalate; that we will have full employment, i.e., 4% or

under unemployment; a certain rate of economic growth and the like. The better the forecast the more carefully drawn the assumptions. In some cases the forecaster makes his forecast on the basis of alternative assumptions thus giving the consumer a choice.

Assumptions having been specified the forecaster then proceeds to develop a conceptual framework or theory (often called a model) in which he states what the relevant factors are and how they relate. There are of course almost an indefinite variety of variables but since forecasting is a combination of common sense judgement and statistics the forecaster decides which are relevant factors or variables. In projecting the number of teachers that will be required five years hence the forecasting model or theory is usually quite simple. It states that our population will be at X level in the future. Next it states that we will have X pupils in various kinds of schools as an extrapolation of what now exists. And given certain teacher-pupil ratios we will need X teachers in the future.

Assumptions first, identification of relationships (theorizing conceptualizing or model making) second is followed by developing relevant data which are then "plugged into" the model for analysis and prediction. All forecasting follows this procedure, but the degree of complexity varies tremendously from case to case. In general there are two forms of forecasts: one is direct and usually a simple extrapolation of past trends while the other form is known as a derived forecast because the forecast comes from an examination (derivation) of technological, economic or cultural expectations and relationships. Sophisticated estimations he uses more powerful statistical or econometric tools like input-output tables, matrices, regression equations and the like, but it needs to be reemphasized that the econometrics or statistics must always be coupled to judgement since forecasting is not yet a scientific endeavor.

Notice how this forecasting sequence works in the following case study of BLS long range employment or occupational forecasts. Their general procedure is:

(1) Guess or estimate what the level of economic activity for the prediction period will be - as a rate of growth percentage or as a total GNP figure.

(2) Establish relationships between strategic variables like investment, consumption, government expenditure, income payments, etc.

(3) Analyze consumption patterns and estimate patterns for forecasted period.

(4) Estimate productivity and technological changes and estimate industry production in terms of economic growth assumptions.

(5) Work out details for total employment and for employment by occupation.

The problems are many. Among other things the forecaster is frequently frustrated because there are many gaps in his data. He may not have information on job vacancies, on what skills are actually required, on what skills are transferable or surprisingly (to most people) he may not even know how many people are employed in an occupation. (Our construction industry work force is largely a mystery - statistics about it vary tremendously). Psychological and social factors affect individuals and forecasts. Government policy changes. Employers and others make do. Nevertheless, the forecaster must try to account for these and other changes.

And, finally, although forecasts have often been inaccurate they are useful and still much better than mere conjecture. The two main sources of occupational analysis and prediction are the BLS and BES. Both produce regular and occasional reports that vocational educators should study before attempting to survey and analyze their own labor market needs. It is only by blending national and state projections with careful local studies that the educator will be in a position to make valid judgements about the educational needs in his local area.

As a postlude the work study leader exhorted his group to use survey and forecasting theory - to obtain his own data as well but then to remember that all of this is simply preliminary to the real step which is <u>action</u>.

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

STUDY GROUP B REPORT

Leader: Dr. Kenneth T. Doran
Associate University Dean for Two-Year Colleges
State University of New York

Recorder: Seldon Kruger, Chairman
General Studies Division
Agricultural & Technical College, Delhi

The objectives of this group were:

(1) Identify and review exemplary post-high school programs.

(2) Identify criteria for determining when new complementary programs should be added to the curriculum.

Personnel of the group included:

Halbrook, Shirrell K. - Assistant Director, Area Vocational Center
Pines Vocational Technical School
Pine Bluff, Arkansas

Neff, Gale N. - Coordinator of Technical & Vocational Education
Tarrant County Jr. College District
Fort Worth, Texas

Otto, Frederick F. - Dean of Continuing Education & Community Services
Hagerstown Junior College
Hagerstown, Maryland

Popp, Miss Janet E. - Division of Occupational Education,
Bureau of Home Economics, State
Education Department
Albany, New York

Plenke, John R. - Program Administrator, State Board of
Vocational, Technical & Adult Education
Madison, Wisconsin

Simmons, Don C. - Assistant Director, Vocational and Technical Education
Springfield Area Vocational-Tech School
Springfield, Missouri

Talbott, John W. Supervisor, State Department of Vocational-Technical Education
Stillwater, Oklahoma

Masucci, Eugene - Director of Occupational and Technical Education, BOCES
Patchogue, New York

Thomas, Gary - Program Officer, Division of Vocational and Technical Education
Department of HEW, Office of Education
Washington, D. C.

In attacking objective (1), the group first discussed the sense in which we should consider the phrase "exemplary post-high school programs." Should it be in the restricted sense of the Federal regulations pertaining to Public Law 90-576, which define exemplary programs as those "designed to broaden occupational aspirations and opportunities for youths, particularly youths, and to serve as models for use in vocational education programs"?--or should it be a broader concept? We decided in favor of the latter approach. For example, an official from another state calls the Central Office of State University of New York, in Albany, and says: "We haven't done much with post-secondary vocational education in our state and now we are planning to get into it. Do you have some colleges offering exemplary programs that you feel it would be worthwhile for us to visit? What criteria would we have in mind when we advised this questioner to visit Agricultural and Technical College A or Community Colleges B and C? Is it possible that our study group could devise a rudimentary checklist of criteria for defining an exemplary institutional program of post-high school vocational education? We felt that we could, and although we left the actual formulation of a checklist to experts who might wish to tackle such a project, we devoted our four days of discussion to the principal questions which we felt would go into the construction of such a checklist. This question approach, then, was the principal matrix for our discussion.

Objectives (1)

1. Should an exemplary post-secondary institutional pro- of vocational education include more than one level of difficulty?

Discussion supported the concept that an institution have, insofar as it is possible, a broad range of program difficulty (e.g., certificate, diploma, and degree). The extent to which an institution offers programs at varying difficulty levels should be determined by institutional objectives, availability

of programs at other institutions in its immediate vicinity, and manpower needs.

A broad vocational educational offering within a single institution provides for individual student needs and student mobility.

A concern was expressed on the part of one secondary-school representative that community colleges might be dipping too low by offering vocational programs of less-than-technician level. Students who couldn't otherwise be admitted to college are tempted to drop out of high school since they can receive remedial and other work at the community college. "Egalitarianism should not make a high school diploma meaningless.... or dilute the importance of a college degree."

Dr. Doran said that in New York we are aware of the problem and will generally require that a student have a high school diploma or equivalency certificate or be at least 18 years of age. These conditions are designed to encourage students to stay in high school during the normal high school age range. At the same time, after a student reaches 18 years of age, the State University of New York feels he should not have to "go back to high school" but should find opportunity for study and improvement at his peer level in a post-secondary institution.

2. Should every program of vocational-technical education, regardless of length or level of difficulty, include required general education?

Diversity of opinion existed in attempting to answer this question. The difference appeared to be one of degree rather than of kind. That is most group members appeared to favor the inclusion of some general education. Recognizing the occupational objective of vocational programs, some felt general education should be taught as separate courses (English, math, etc.) but with specific application to the vocational objective.

Reasons advanced for including general education in vocational programs include:

a. Students "will not get it anywhere else."
b. Assists students in dealing with people.
c. Prepares students for change and mobility.

Others felt that general education need not be separated within a vocational education program since students have received similar exposure in high school, but rather such general education as may be required to make a student a better worker should be integrated into the vocational program.

3. If general education is required should the same courses be offered to the vocational-technical and transfer students?

No agreement was reached on this question, although the

majority present appeared to answer the question NO. It was pointed out that part of the problem is related to the meaning and the role attached to general studies. That is, an English instructor's view of his discipline appears to be at variance with what others outside his discipline view as the proper role of English. In addition, is the content and level of general education, as described, "college level?"

4. Should an exemplary post-secondary school vocational-technical program include cooperative work experience?

While it may be desirable to provide cooperative work experience as part of post-secondary vocation-technical programs, such experience need not be viewed as being of equal importance in all programs. Frequently, too, the location of an institution precludes a cooperative work study program.

Advantages of cooperative work-study program include:

a. Reduction in institutional equipment costs because "complete work stations" are not always required.
b. Introduction of students to "world of work" while providing students with some income.
c. Provides student with a variety of (supervised) job experiences in his field.
d. Assists educational institutions to discover possible weaknesses in students' job preparation and evaluate the educational institution's program.

Where cooperative programs are difficult to establish because of institutional location, effort should be made to provide for or encourage summer work experience.

Post-secondary programs may be more innovative in terms of their length and timing than high school programs. In any event, cooperative work programs to achieve maximum results should be exposed to the "broad picture" of the job and not be limited to a narrow task or group of tasks.

It was suggested that the Federal government consider providing some tax incentive to firms participating in co-operative work-study programs.

5. Should exemplary post-secondary vocational-technical programs be articulated with high school programs?

Post-secondary institutions should provide for advanced student placement or credit for relevant work completed at the secondary level.

Group B agreed that close, continuing cooperation and program articulation between high schools and post-secondary institutions would generally serve to minimize program over-lapping and duplication. Inter-institutional cooperation would

facilitate arriving at a unified approach in determining area manpower needs.

For high school graduates with no prior vocational education but with the desire to begin vocational-technical education, post-secondary institutions should be prepared to offer appropriate introductory-level work.

6. Should exemplary post-secondary vocational-technical programs be taught by faculty with work experience, degrees, and/or certification?

While the "traditional safeguards" (degrees, certification, etc.) are deemed desirable at elementary and secondary teaching levels in most states, fewer agree on their importance at the post-secondary level. Degrees alone and/or teacher certification do not in and of themselves insure effective vocational-technical instruction at any level. Group experience indicates that practical work experience combined with the A.A.S. degree has proven to provide rather effective preparation for a post-secondary teacher because teachers prepared in this way, usually:

a. Relate well to educational supervision.
b. Relate well to and generally understand student needs and problems.
c. Are familiar with and understand the technical literature of their fields.
d. Are capable of addressing themselves to the educational process.

The baccalaureate degree with no practical experience tends to produce a teacher unable to relate to the learner's level, while the teacher with only work experience tends to be "production-oriented" and not learner-oriented, sometimes lacking academic awareness.

7. John Plenke introduces a list of "typical features" of exemplary programs, drawn from his own experience and professional reading. The list follows:

a. Coordination between high school vocational-technical and post-secondary institutions.
b. Combining (and integrating) traditional curriculums.
c. Short-term courses, less than one or two-year courses (e.g., pre-technical).
d. Community services to all people.
e. Outreach - taking service off the campus.
f. Ladder approach in programming services. Building programs so they extend from basic education through occupational and as far as the individual's ability will allow him to go (e.g., auxiliary personnel in education).
g. Impact - service to those in the community who need the service but are not presently being reached.

h. Acceptance of one and two-year curriculum and students by four-year institutions.
i. Involvement of people who are going to be affected by development of the program.
j. Use of business and industry-owned equipment.
k. Gifts of equipment by industry.
l. "Hire-back" of graduates of two-year colleges. Post-secondary institutions must be cautious, however, in hiring too many of their own graduates so as to avoid "inbreeding".
m. Social welfare and governmental services.
n. Cluster approach to program planning.
o. Program planning, development, and budgeting system so as to maximize limited resources.
p. Space utilization through multiple-instructor utilization.

In general discussion, the group advised caution that an institution does not use public funds in developing and training individuals for a specific firm. Programs of public institutions should be under public supervision and open admission to the community.

Objective (2)

Identify criteria for determining when new complementary programs should be added to the curriculum.

1. Student need and ability

2. Community acceptance and need (employment potential).

3. Geographic distance of similar options. How far would students have to travel to get similar training?

4. Cost factors.

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

STUDY GROUP C REPORT

Leader: President James Fitzgibbons
Hudson Valley Community College
Troy, New York

Recorder: Wilbur Farnsworth, Chairman
Agriculture Division
Agricultural & Technical College, Delhi

Two topics were assigned:

TOPIC 1) planning a balanced vocational educational program for the entire student body.

It is apparent at the outset that the juxtaposition of the words "balanced vocational educational program" present a strong temptation to spend excessive time in semantics,-- in a healthy exchange of views relating to the definitions of balanced programs, occupational, vocational -- this must be resisted at all costs. However, to insure a workable, productive and mutually acceptable frame of reference certain possible interpretations will be briefly explored as appropriate to this section.

Several concepts of balance certainly have relevance in the light of the rapid emergence of the comprehensive community college in the field of higher education. Balance could be understood as a relationship between the complex of courses and subjects generally included in the general studies area and the subject matter definable as a part of the major skills area. Again, balance could be translated as a measure of the distribution of the college's effort in vocational, engineering technologies, transfer programs, health science curriculums, and the many other career areas.

The particular college's distribution of students between degree and non-degree curriculums is a further interpretation.

Finally, balance could be intended to relate to the desirability of some vocational education courses for all students...A.A., A.A.S., A.S. degree programs in the engineering technologies transfer programs, business curriculums, science

curriculums and extended even beyond the degree programs to include other certificate programs and programs for the disadvantaged. The group efforts largely centered on this concept.

Again, to minimize the "semantic noise effect" the term "occupational" is accepted as generic to such words as vocational, career, technical terminal, and other terms in common use describing programs leading to employable marketable skills.

An additional boundary condition for the purpose of this conference limits the concept of occupational programs to the post-high school level including such broad areas as career technical leading to a two year associate degree, non-degree certificate programs of one or two years length (recognizing that certificate programs offered as a part of the regular curricular structure of a comprehensive community college may not be limited to high school graduates) pre-technical programs and remedial programs of one year or less and possibly post-college programs including refresher programs, professional licensing examination re: preparations programs, and professional refresher programs. Obviously this last category represents a "gray area" in the group's deliberations.

The above set of guidelines would further include the concept that this particular treatment restricts the student body to full time students and members of an on-going academic community.

A first approach is in the direction of establishing a set of procedures and techniques for developing a balanced vocational curriculum. Understandably, many of the steps in this particular curriculum development will not differ essentially than those applicable to curriculum development generally. Certain factors must be considered.

The appropriate statutes in the various States governing the establishment of curriculums and the establishment of comprehensive community colleges or two-year public colleges as is expected show a great range. However, there is sufficient commonality among the collection of individual State statutes precisely defining the students who may be served, the relation of the fiscal control vis-a-vis curriculum development, definition of various areas of jurisdiction among the several levels of public education and private education, that mandate very critical review. Some States exhibit statutory limits that seriously inhibit deviation from traditional proscribed curriculum structures such that, for example, the inclusion of craft vocational skilled courses in a liberal arts humanities program leading to transfer to an upper division college would result in very serious problems. The possibility of disallowing certain courses and/or programs for State matching in terms of financial support is very real. This suggests that in some States it may be necessary to undertake a program of amending or modifying existing statutes before any real program

of enriching existing curriculums with vocational courses may be undertaken. Again, statutes of other State exhibit very sharply defined lines of jurisdictional authority among the several educational agencies responsible for discrete levels in that State. The main point here, of course, is that it would be imprudent and very likely result in wasted effort to attempt significant adjustments in curricula vis-a-vis vocational educational programs without very critical review of existing statutes.

In addition to the relevancy of appropriate statutes other factors must be considered in such an undertaking and would include attention to organizational or professional association needs and requirements; the economic-social needs of the area.. business, industry, health, community; fiscal responsibility for the operation of the community college in relation to resources; most importantly a clearly defined philosophy of the institution exhibiting precise understanding of its objective, its mission and its role; and last, but one that must not be overlooked, the "life style" of the college's constituency. Recent developments in the matter of student desire for substantive participation in the determination of college offerings lend very substantive, and perhaps agonizing support to the last factor. Traditional positions of professional associations and societies represent a very sensitive area that must be considered in so significant a step that would include craft vocational skill courses in a humanities transfer curriculum.

To develop the issue of a clear understanding of fiscal responsibility and sources of financial support would be but to belabor in a very obvious factor -- the curriculum development is intimately dependent upon sponsor financial control and certainly endorsement and cooperation of the latter agency must be obtained.

It is quite conceivable that existing curriculums may lead to licensure examinations and certification and hence would require approval by the appropriate professional organization and/or the state or other political subdivision licensing board. Qualifying certificates for admission to the examinations which generally are the responsibility of the training institution must be effected by such curriculum decisions. This poses a rather rigid boundary condition for many states.

The issue of complete understanding of the socio-economic needs of the area is very clearly illustrated by the present development in New York State of the Boards of Cooperative Educational Services in the matter of establishing high school vocational area centers. It is immediately evident that very close coordination with such developments is necessary to insure an effective program at the community college level.

It is quite conceivable that the philosophy of the community college in an adjacent political subdivision might provide

that institution with very compelling arguments for protecting the "purity" of the existing degree programs in the transfer liberal arts, engineering science and business curriculums. This might well cause the community college presently considering vocational educational programs, for all of its students, to pause and weigh the possible "stigmatizing" effects.

A major problem relating to the development of such a "universal" vocational education program for all students in a community college resides in the long standing traditions and biases of staff members both administrative and teaching in the liberal arts transfer curricula. A possible approach to resolving this concern, a concern undoubtedly founded in good faith, would be the responsibility of using team teaching techniques in providing a broad survey approach, for example, in "materials" science.

TOPIC 2) To determine ways of using local advisory committees and other groups such as employers to strengthen program offering and accomplishments. Many College Administrations over the past several years have addressed themselves to the effective use of advisory committees: vis-a-vis, community college curriculum development. Much of their findings still has currency. Therefore, this report will not attempt to distill a model from the best features of advisory committees familiar to participants in the conference. One "canonical form"did surface during the deliberations and this will be described.

The study group in an attempt to maximize its efforts within the very, very limited time provided, agreed upon a division of the material into five major sections: A precise statement of the purposes for having advisory committees; the composition of advisory committees--both initial and continuing; the phases of development of local advisory committees; the development of a functional "modus operandi", and finally the identification of recommendations and suggestions that represented original thinking and conceivably warrant further exploration.

Most of the purposes as noted above have been stated at other times and in other contexts but in the interest of achieving a focal point for the present deliberations they would include the following:

1) Validation of the need for the curriculum or the program and reflecting the economy of the area, its demography, the life styles of the students to be served, and developmental projections.

2) To assist the college in the initial planning of facilities development.

3) To insure the acceptance of the program or curriculum concept to those publics with vested interests in the community college--parents, taxpayers, other schools

in the area, appropriate legislative bodies and not the least important the faculties of other curriculums presently offered in the institution.

4) To advise on the acquisition of initial equipment.

5) To advise on the selection of administration and teaching staff recognizing the extreme sensitivity of such a function.

6) To provide a continuing review of curriculum to insure it against obsolescence and lack of relevance.

7) To provide information relating to industrial changes, needs and technological developments thus insuring that the particular curriculum department is able to maintain a posture of response with minimal change-over time.

8) To develop the characteristics for staff (there is no inference here that the authority for hiring or even interviewing staff should reside in the advisory committee.)

9) To establish liaison with relevant professional societies.

10) In the general area of public relations to provide feed back to the college and the curriculum in matters of public reaction and acceptance in extreme cases to protect the college and the department against irresponsible statements and actions of those who proceed with mis-information whether in good faith or otherwise.

The first five points noted above would be identified with the function of the advisory committee in the initial planning of the curriculum and the other points identify the continuing responsibility and function of advisory committees. It is suggested therefore that the initial planning committee, an ad hoc committee, although it may ultimately emerge as the curriculum committee, probably should be somewhat different in its composition than a continuing advisory committee. Specifically, to insure the strongest possible curriculum development membership on the advisory committee should be as homogenous as possible and specialized as to the discipline. At the same time such homogenity should not be allowed to impose a serious constraint in the establishment of a representative group of advisors. Area industries should be represented, high school guidance people, representatives of government particularly, those able to provide statistics and logistics relating to manpower-employment problems, organized labor, and most important small independent businesses who must contribute to the support of the college. In addition it has been suggested that there is merit in including available staff members from

other area colleges.

The concept of student membership on the initial advisory committee was discarded in favor of a later appointment to the continuing committee.

It often happens that the work of the initial planning committee or initial advisory committee was undertaken prior to the appointment of an administrative person at the college, i.e., a division or department chairman. However, once the department chairman is on the board the responsibility for providing leadership to the advisory committee and particu- in making the transition from a planning committee to an on- going curriculum advisory committee must rest with this per- son. The burden for replenishment and replacement of non- productive members falls on his shoulders. Appointment to the advisory committee, of course, resides in the authority of the president of the college acting for the Board of Trust- ees.

Certain guidelines have been suggested as an assist to the department chairman and the advisory committee in estab- lishing a productive effective body.

1) The committee appoints its own chairman for one year. He may succeed himself.

2) The executive secretary of the advisory committee should be from the faculty and the success of the committee is intimately dependent upon his efforts.

3) Very early the chairman and the advisory committee should delegate a subcommittee to identify pro- blems and objectives to be undertaken during a particular academic year, to establish a precise agenda, and a program of work that will result in minimum waste of time and effort.

4) It was noted above that advisory committee members provide tremendous public relations potential. Properly directed, this can provide real thrust to the development of a truly up to date, accepted curriculum.

5) Members of advisory committees receive no pay and probably underwrite many of the related expenses from their own personal resources, and often times receive little acknowledgement from their own em- ployer for the time and effort devoted to the col- lege. It is important therefore that the college provide adequate recognition and honor all members of advisory committees for their efforts and accom- plishments. Such honor may take the form of an annual dinner, an appointment or a service docu- ment or certificate, conceivably singling out those

whose achievements were outstanding for recognition at student graduation or other ceremony involving the supporting public.

6) Advisory committee members are not fund raisers nor should they be construed as potential lobbyists for the college. However, at the local legislative level of the government bodies sponsoring the community college, advisory committee members must per se exercise very useful influence.

Finally, the deliberations led to several proposals as possibly representing new ideas or departures from the traditional role, composition, and structure of advisory committees. The first of these suggested the creation of a coordinating group at a state wide level consisting of delegates from advisory committee members from different institutions, here, for example, community colleges, but where such members are serving as advisory committee members in the same discipline or curriculum. In addition the state wide coordinating committee should include professional society representatives to insure a voice in the curriculum developments.

The purpose of this group would be recommending only a and its functions would include:

1) A communications network in relation to curriculum discipline needs and developments.

2) Assist in the decision making relating to the establishment of new curriculums in new locations in the interest of avoiding costly duplication *and facility development*.

3) Lobbying would not be considered an appropriate function of this group.

4) The heterogeneous membership would probably maximize the effectiveness of the state wide coordinating group.

5) It could provide a very valuable curriculum (program) evaluation device equivalent to present state registration programs, regional accreditations or specialized accreditations. Very likely its functions should be such that it would work in conjuction with such established accreditation agencies. Another proposal would consider the inclusion of present students on advisory committees. Recognizably, in today's age of dissent and protest...and yearning for total participation, there is the danger that such a move could be construed as part of the present "syndrome" resulting from the overemphasis or preoccupation with student rights. A companion suggestion perhaps with merit

would involve recent graduates of the curriculum as advisory committee members.

It is agreed that an interlocking relationship between the Board of Trustees of the college and the advisory committees was not only not useful but something to be avoided at all costs. Finally the concept of appointing faculty members from other existing institutions particularly from other disciplines not intimately related to the discipline under study received favorable reaction. Such an arrangement could have the advantage of insuring a "balanced" program in relation to the matter of general studies vis-a-vis specialized subjects.

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

STUDY GROUP D REPORT

Leader: President David Huntington
Agricultural and Technical College
Alfred, New York

Recorder: George Duncan, Chairman
Construction Technology Division
Agricultural & Technical College, Delhi

What qualities, characteristics and skills do we seek when selecting faculty to teach in post-high school vocational education programs? What clues or criteria are there for identifying and evaluating prospective faculty? Where will we find individuals who have the characteristics we seek and what means and media are effective in reaching individuals who represent prospective faculty? What incentives, challenges or inducements can we offer that will attract the kind of people we seek for our faculties? What sort of in-service programs should colleges encourage to improve the faculty?

The above were the questions identified by the participants in group D as they addressed themselves to the matter of staff requirements and in-service training programs for post-secondary vocational faculty. The success of a vocational education program will depend to a great extent upon the quality of its faculty. Thus, efforts related to searching, recruiting, and ultimately selecting faculty may be the most significant functions performed by administrators of such programs.

Semantics and terminology represented a major hurdle as group D attempted to come to grips with major issues. Differentiation between vocational and technical education was cause for some disagreement but this was resolved by concurrence with the concept presented by Dr. Gerald James, President of Rockingham Community College. This concept recognizes the similarity of the two and the difficulty in drawing a clear line of differentiation. A field becomes more technical and less vocational as the emphasis of instruction shifts from manipulative skill to greater amounts of theory and basic principles. There was a consensus that differentiation between these two

was not critical for the group topic since staff requirements follow a similar pattern for both types of programs with the desired background, experience, and education of the faculty differing in a manner similar to the chart presented by Dr. James, i.e., greater concern for manipulative skills for vocational instruction.

Discussion revealed complete agreement that the purpose and objectives of a curriculum must be clearly defined and must receive prime consideration in determining staffing requirements. Such definition must be made by each individual institution and it follows that staffing patterns and requirements will vary between institutions based upon their slightly differing objectives.

A full discussion of qualities, skills, and characteristics sought in new faculty resulted in concurrence with a concise summary developed by a panel of consultants on vocational education and published in a U.S. Department of Health, Education and Welfare publication, "Education for a Changing World of Work." This panel suggests the following as characteristics to consider in the selection of new faculty:

1. Competence in the occupation which they will teach.
2. Evidence of ability to influence the learner to be a skilled worker and a good citizen.
3. Evidence of ability to teach or the willingness to complete a program to make them proficient as teachers.

Group D agreed that it was also important to evaluate if an individual has a sincere interest in teaching and further, it should be determined if there is a sincere commitment to vocational-technical education. It was also agreed that consideration be given to evidence of a definite desire to undertake a continuing program of professional improvement.

An examination of these criteria prompted the observation that the qualities sought for faculty to teach in vocational and technical education were essentially the same qualities desired of all teachers. Empathy, enthusiasm, dedication, ability to communicate - these and more, are common characteristics of all good teachers. Competence in the occupation which the teacher will teach is equally important in all teaching fields. Perhaps the major distinction is the desirability for considerable practical experience to teach a vocational subject; there was a strong reaction that experience of this form was absolutely essential. It was noted that this desired characteristic causes a dilemma since it is difficult to find individuals that have both extensive practical experience and the usual academic qualifications considered important for teachers. Further, persons who possess a high degree of skill in a craft are usually earning high wages and it is difficult to attract them to the teaching profession with existing salary scales and with the expectation that he must begin a prolonged program of higher education.

Recognizing the enigma, i.e., the scarcity of individuals having academic qualifications, competence in the occupation, practical experience, and an unattractive salary picture, there was discussion of the relative importance of the desired characteristics. Is it easier to find a good teacher and have him develop a competence in an occupation? Can we make good teachers from individuals who have practical experience and occupational competence but lack formal academic preparation and teaching experience? Will individuals with formal education in a technology make good vocational teachers if they lack practical experience in the occupation?

It was difficult to develop a consensus on these questions, however, there was agreement that it would be well to explore all avenues. Perhaps a faculty should have some of each type since the special qualifications of one could offset the deficiencies of another. The importance of practical experience was again stressed; a vocational education faculty should include a strong base of individuals with substantial experience in the occupations.

It was reemphasized, the primary factor determining the success of a post-secondary vocational education program is the quality of its faculty. It may be that the administrator will have no choice in the selection of new faculty since often times it is simply a case of finding anyone with competence to teach the occupation. However, the importance of this selection procedure warrants an all-out effort to find individuals who will make the best teachers. As was suggested earlier, there are various sources of faculty and while it may be impossible to find someone with all of the qualifications we seek, an abundance of candidates should improve the odds of finding a good man. The following are suggested as possible sources of new faculty:

1. Business and industry. This is probably the best source for individuals with considerable practical experience in an occupation. The most obvious is the production employee whose primary attribute is his high degree of skill. Another possibility is the individual who has responsibility for teaching plant personnel. It is probable that such a person has considerable experience in the occupation which he is teaching, but he also has the teaching experience which we seek and has background and knowledge regarding the specific expectations and requirements of the industry that will help to make a vocational training program more meaningful.

2. Teacher training institutions. A number of institutions have programs to train vocational teachers. Vocational teacher training programs in home economics, agriculture, industrial arts, and business education are common sources of teachers for high school vocational programs. Some graduates from these programs may be well suited to teach in post-secondary programs.

3. Other educational institutions. While we are reluctant to advocate hiring faculty away from other institutions, we must recognize that it is frequently good for both the individual and the institutions to make changes. Thus, it may be that a possible source of faculty will be from another college or from a high school particularly if it is essential that the program find someone who is trained in vocational education and experienced in teaching. This is also the source of experienced teachers in other subject fields who may have an occupational skill and decide they would prefer to teach in this area rather than their existing field. The occupational skill may have been developed as an avocation or perhaps through summer job experience. Regardless, it will be recognized that some outstanding vocational teachers have developed from individuals who entered teaching through another subject field and shifted to a vocational subject area.

4. Armed forces. The military service has an extensive training program in a wide variety of occupational skills. Thus, it is possible to find among armed service veterans, individuals having both formal training and experience in a skill, as well as individuals who may have participated in the instructional program and thus, have teaching experience.

5. Other service training agencies. It was noted that there are other government agencies such as MDTA and Job Corps that include vocational training within their activities. It is quite possible that staff from these programs represent potential faculty for post-secondary vocational education programs.

6. Peace Corps and Vista Workers. Persons who have been involved in Peace Corps and Vista programs have undoubtedly gained some form of teaching experience and may well have developed a skill in an occupational area. In many cases, the Peace Corps has actively recruited individuals with special occupational skills and has then given them intensive training programs to make them competent teachers. Peace Corps and Vista volunteers serve for a limited period of time and returning volunteers may be a prime source of teaching faculty for post-secondary vocational education.

The search for competent faculty must involve a variety of strategies and the utilization of different media. It is a relatively simple matter to list possible sources of new faculty but contacting them is another matter. This becomes an individual matter since there is no single media or communications channel that will have universal success. The following are suggested as avenues or strategies for contacting prospective faculty:

1. Employment agencies. We tend to think of employment agencies as the source of the less skilled individual yet they can be of considerable assistance in locating professional prospects.

2. Mass advertising and public relations. This might involve the purchase of advertising space or time, but information regarding vacancies can also be disseminated as news stories or as public service announcements. The usual local media such as radio, television, and newspaper are suitable for this purpose. It would be well to also consider the utilization of special news media that have a specific appeal to ethnic groups.

Mass advertising should also utilize occupational bulletins, trade and professional journals. An unusual and effective approach used at Los Angeles Trade and Technical College is a school newsletter distributed to alumni and throughout the local community. Such a newsletter could contain detailed descriptions of college position openings.

3. Friends and personal contact. The proverbial grapevine and word of mouth remain one of the most effective means of contacting faculty prospects. An astute administrator will utilize every opportunity to inform colleagues of his faculty needs and to enlist their assistance in recommending possible candidates.

4. Trade and professional associations. It is a good practice to keep craft unions and other professional organizations informed of faculty needs in the occupational areas related to the particular association. Such associations welcome an opportunity to serve as a clearing house and recognize that a good relationship with the college is mutually beneficial.

5. Advisory councils. Most vocational curricula have lay advisory councils consisting of a number of individuals representing various segments of the particular occupational field. Well-informed councils can be most helpful in recommending candidates for faculty vacancies.

6. Military and other service organization separation centers.

Government service organizations such as Peace Corps, Vista, and the military service process those who are leaving the service through separation centers. The agency attempts to assist these people in locating employment opportunities and it would be well to keep the centers supplied with information regarding the college and bulletins regarding position vacancies.

7. Ethnic organizations. It is good practice to keep organizations representing ethnic groups informed of position vacancies and to enlist their assistance in contacting appropriate members of the group regarding vacancies.

8. Employers and/or business leaders. It has been found that industrial employers are quite cooperative in assisting colleges to locate and attract competent faculty. They recognize the importance of a steady supply of well trained grad-

uates and the possibility of reduced training expense to the industry. It is not uncommon for an employer to encourage some of his best craftsmen or some if his key personnel training people to take employment with a vocational institution since he knows this may give him an advantage in the hiring of graduates. The placement of one of his key men at the institution will also assure him that the students will learn the special techniques or skill utilized and considered important in his industry.

9. Central Statewide Personnel Office. Many states provide a statewide personnel clearing house listing position vacancies and circulating personal vita of individuals contacting the office and seeking teaching positions.

10. Vacancy announcements. Most of the above avenues for contacting prospective faculty require some concise manner for outlining the position vacancy. A simple, single page vacancy announcement, reproduced in quantity, is an inexpensive means of listing the facts and is convenient for distributing through the wide variety of channels mentioned above.

Wide publication and an adequate search for candidates will hopefully yield a sufficient number of applicants to involve a process of selection. It will be recognized that you will seldom find the perfect individual who has just the right combination of occupational skill and practical experience, educational background, and expertise in teaching. It is probable that you will be suspicious of any such individual since you will wonder why he is available. Realizing the critical importance of selecting good faculty and faced with the possibility of a choice, the administrator will search for information and clues that will enable him to evaluate an applicant's potential as a vocational teacher. It is relatively easy to evaluate his competence in his occupation since his reputation and the recommendations of his colleagues and his superiors can be quite objective. His employment history, his length and variety of experience, and the quality of the product related to his skill are matters of record and generally easily obtainable.

An evaluation of a candidate's ability to teach and to influence a learner is not so easy to establish. These tend to be subjective judgements and it is quite likely that you will be considering individuals who have had no prior teaching experience. It is common practice to relate an individual's personality to his ability to teach. This is a rather tenuous relationship but it is generally conceded that a person's ability to relate and to influence another is affected by his personality. A likeable and friendly individual may or may not be a good teacher but it is probable that a disagreeable and abrasive individual will be a poor teacher. Similarly, an abundance of enthusiasm does not guarantee that a person will make a good teacher but a lack of enthusiasm is a pretty good indication that he would make a dull teacher. Lacking reliable

recommendations regarding a person's ability to teach, an evaluation of his personality, recognizing the traits of a good teacher, is a factor in selection.

It was suggested that an indication of a person's interest in young people could be found through reviewing his participation in youth programs, involvement as a Boy Scout leader, teaching Sunday school classes and participation in YMCA programs. These are examples of volunteer activities that are demanding of an adult and involvement in them is a pretty good indication that the individual is sincerely interested in young people. Such an interest and a willingness to give of oneself are characteristics of an outstanding teacher.

Individuals with the characteristics, experience, and skills which we seek for teaching in post-secondary vocational programs will likely already hold good jobs or will have a variety of other job opportunities. Thus, the location of a good prospect must be followed by good salesmanship to convince him to accept your job offer. Different people are impressed by different aspects of a position so it is well to keep in mind all of the many advantages and to give these appropriate attention when extending a job offer.

While it may be difficult to match the wages and salary levels of business and industry, teaching salaries must be reasonably competitive if we are to attract top quality teachers. It is probable that you will expect a new faculty member to embark on a program of professional improvement during the summer months but nevertheless, the absence of formal teaching responsibilities in the summer or the opportunity for extra compensation for summer teaching are considerations that will help an individual to rationalize the acceptance of a teaching position that may have a lower salary than that which he is now receiving. Most teaching positions have relatively liberal fringe benefits and this is an element that can also make the financial picture somewhat more attractive. Retirement plans for teachers are often better than found in business or industry and this might be an inducement.

Persons who have worked for a number of years in business or industry are often impressed by the prospects of a teaching position because of the anticipated personal satisfaction from such a position. They appreciate the concept of a professional style of work in which they are pretty much the boss of their own classroom, developing their own course materials and their own particular style of teaching. The concept of professional responsibility and the absence of a time clock is likely to have an appeal for the innovative and aggressive prospective teacher.

Another aspect yielding personal satisfaction is the social prestige and the charisma of college work. A college teacher is a highly respected person in society and this status may prove to be an attraction in hiring new faculty. Others are

attracted by the prospects of working with young people. A sincere interest in young people is a trait which we seek and persons with this trait will find the opportunity to be meaningful.

Oftentimes teaching is considered a personal challenge for someone who has worked in business or industry for a number of years; many harbor a secret desire to be teachers of others. It is interesting that this is often the case of someone who has developed a particular skill and sees within a teaching position the opportunity to capitalize on his skill and to fulfill that personal challenge which teaching represents. Equally important to such a person is the personal satisfaction he can anticipate from a sense of achievement when he is successful in influencing the learner.

Another feature of post-secondary vocational education that has the potential for yielding personal satisfaction is the physical environment at our colleges. An attractive college campus and a well-equipped and efficient laboratory can make quite an impression and can serve as another element to attract the candidate of your choice.

The type of individual which we seek for the faculty of post-secondary vocational education programs will have growing aspirations and a desire to continually improve himself. Accordingly, an aspect of the teaching profession which will have appeal is the opportunity it provides for further education. The summer vacation periods and policies permitting sabbatical leaves will be meaningful for such individuals and it is probable that they will be interested in the opportunity to enroll in courses that might be offered during the school year. These educational opportunities may be particularly important to the individual who has less than a baccalaureate degree and who, recognizing this deficiency, welcomes the opportunity to obtain the formal education which he missed when he was younger. Many systems permit the enrollment of their faculty in courses offered by the college or by related institutions with waiver of tuition. Others provide some form of financial reimbursement for such course enrollment and these can be convincing advantages in attempting to attract a candidate.

Without doubt, candidates for teaching posts will be thinking about their future in such a position. It is apparent that there will be no diminishing of the emphasis on education and the need for teachers and their respected position in society will continue to grow. Furthermore, most systems have some form of professional rank or teacher grades and thus, promotional opportunities within the position will be of interest to the candidates.

As was mentioned earlier, individuals having all of the desired traits such as experience, formal education, and occupational skill will be scarce. Thus, in-service programs to improve vocational and technical faculty are of particular significance. It is recommended that each member of the fac-

ulty develop a plan for professional improvement that will serve as a guide and as a measure of progress for his in-service training program. For the sake of simplicity, it is proposed that in-service plans be categoried as 1) development of occupational skills; 2) development of instructional techniques and skills; and 3) general education.

The development of occupational skills is a continuing objective. It should be recognized that this development will involve both upgrading and updating. An individual may be somewhat less proficient than desired and he would need upgrading of his skill. Another might have years of experience and have a highly developed skill but he would need periodic refreshing experiences to keep this skill up-to-date.

It is recognized that the best means for upgrading and updating occupational skills will be through periodic employment in a related industry or through special schools and institutes. Hopefully, a faculty member will have had substantial pre-service experience with a related industry and thus, an occasional summer of industrial experience will keep him updated. It may seem best to provide a longer period for such industrial employment and this may be done through a leave of absence or through a sabbatical leave. A staff exchange between the college and industry may be a convenient means for arranging for industrial experience without the problem of having to find a temporary faculty replacement.

Special schools and institutes represent another means for upgrading and updating faculty. Most automobile manufacturers have frequent short courses for mechanics and they will usually welcome vocational faculty to such courses. Other industries have similar training programs and these can be excellent for vocational faculty. Colleges and universities also sponsor special courses of this sort. For example, it is quite common for an institution to offer an evening course or a summer institute to update computer programmers. A faculty member teaching data processing will want to utilize such courses to keep up to date.

Many of the vocational and technical colleges will find it worthwhile to encourage faculty to enroll in some of the college's own course offerings. To illustrate, a faculty member teaching a course in drafting might be well advised to enroll in the college's course dealing with mechanical design. The faculty member teaching automotive mechanics might wish to update his skill area by enrolling in a course in air conditioning. In-service enrollment in the college's own course offerings is particularly convenient and usually involves no problem for tuition waiver.

The development of an occupational skill may be best enhanced through a study of the industry by tours and field trips. Some individuals may have extensive experience in a limited area and a summer tour of industry or an occasional trip during

the year may provide them a broader perspective and make their occupational skill more valuable.

There are a number of steps that can be recommended to provide opportunity for in-service development of instructional techniques and skills. Formal courses of study through summer session, college continuing education offerings, and special workshops are usually readily available at institutions offering teacher training programs. These may not be directly applicable to vocational and technical instruction but it is likely that some of these courses will be helpful and a desirable part of an in-service development program. The college should not depend on this type of program however, but should be providing in-service supervision and assistance to the faculty. This is absolutely essential for a new member of the faculty who has had no prior teaching experience and who may have little or no idea how to proceed to teach his occupation. Department chairmen must assume major responsibility for such supervision and class visitations and consultations will be particularly important. Observation, consultation, and encouragement by colleagues is also an effecrive means of assisting new faculty. A practice of colleague visitation to classes should be encouraged to whatever extent college teaching schedules permit.

The State University Agricultural and Technical College at Alfred, New York, reports enthusuastically about a full-time teaching consultant whose sole function is to assist faculty in the development and improvement of their teaching techniques. This institution reports the utilization of a person who has had many years of teaching experience in both a subject field and in teacher education. He is available on a voluntary basis to observe classes, to conduct teaching seminars, and to be available for individual consultation.

Faculty workshops represent another means for sharing ideas regarding teaching techniques. General brainstorming sessions of the faculty in which they exchange ideas and experiences should be a regular practice. Workshops bringing in outside specialists to describe techniques or to demonstrate special equipment may be quite helpful. Regional and statewide conferences that direct attention to teaching techniques represent another resource for upgrading faculty.

The college might wish to develop an independent study program related to teaching techniques for the improvement of faculty. It is suggested that a video recording of a class session provides an excellent opportunity for self analysis. A college having video tape equipment might find it possible to make it available for this purpose. The college will want to gather all forms of resource materials related to instructional techniques. The AAJC Journal is an excellent source of instructional ideas and it might be well for the college to obtain a group subscription in order that each member of the faculty might have a personal copy. Other materials

should be located in the library and be readily available to the faculty. Conceiveably, the college could invest in some programmed learning materials that would enable the faculty member to follow a formalized program of independent study in teacher education courses. Provision for the visitation to classes in other schools is another suggestion for the in-service development of instructional techniques.

These are but a few suggestions and each institution will want to develop its own special in-service programs. Perhaps most significant will be the college's demonstration of its convictions regarding the importance of high quality teaching. The encouragement for improved instructional techniques and college provision for such improvement will set the tone and the example for faculty to follow.

One of the continuing concerns of vocational and technical education is the possibility that the skill or the technology will be stressed to the exclusion of general education with inadequate recognition of a person's responsibility to society. Most institutions include among their listed objectives, some indication of their desire to contribute to the personal growth of the students and to assist them to become responsible citizens. There is a tendency on the part of the technical faculty to assume that this responsibility will be carried by the Arts and Science Division and that they need not take time from the occupational instruction for this purpose. However, we all recognize that the development of concepts regarding responsible citizenship and the personal growth of our students takes place constantly and is influenced by every instructor. Thus, an important part of an in-service training program for faculty will be the development of their personal background in the humanities and social sciences. Accordingly, enrollment in formal courses in these areas is an appropriate part of a professional development plan. A very logical and convenient means for such course work would be through enrollment in courses offered by the local faculty. Others might find it more convenient to enroll in courses at another institution or in courses offered at the local community through a continuing education offering of a university.

Informal activities on and off the campus may also conribute to the faculty member's development and should be encouraged. The college cultural series is an example of a program readily available to all faculty and the college should do whatever possible to make it convenient and to encourage faculty to attend these programs. Involvement in community programs and the simple practice of reading will also contribute to the personal development of the faculty member which, in turn, will make him a more valuable member of the teaching faculty.

It may well be that the truly great impact of a teacher comes from the impression he makes on an individual in the development of his moral and ethical values and his concerns for

societal issues. Yet, it is next to impossible to evaluate either a teacher's capability for this or a student's progress in developing these qualities, thus, it would seem that the college's encouragement of a faculty member's development in this area is the only logical approach to the matter. The indication of a college's concern for these student objectives and teacher qualities may call the faculty member's attention to this responsibility and, hopefully, will enlist his greater concern and effort for this aspect of the educational program.

A review of the strategy for selecting and recruiting faculty and for the in-service training program of faculty appears to leave so much to chance. The true measure of an administrator's skill in the development of a quality faculty must come from the quality of the graduates educated by the institution. An elaluation of a graduate's competence in an occupational skill and of his qualities as a responsible citizen and an evaluation of his personal growth are purely subjective judgements and generally impossible to equate. Somehow or another, an institution does develop a reputation either through the qualities of its graduates or through an effective public relations promotional program. Administrators have little choice but to proceed on an intuitive basis searching for the qualities which they think will contribute to effective teaching and encouraging in-service training programs which they believe will contribute to effective teaching and encouraging in-service training programs which they believe will contribute to the continuing improvement of a faculty member's effectiveness. One can expect criticism for basing his decisions on intuition but experience and continuing attention to the qualities which seem to characterize good teachers will contribute to an "educated" intuition. At the moment, these are the best guides we have available and the importance of quality teaching demands that we continue to strive for an improved faculty utilizing every means to assure the selection of the best possible candidates and to encourage the continuing improvement of all teachers, new and old alike.

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

STUDY GROUP E REPORT

As a result of a total awareness and a most astute posture, the educational leadership of Delhi conceived the above named conference. The conference was based on the self-evident assumption that all persons involved in the continuance of post-high school education have much to share and to do in terms of providing for the potential enrollee a program of modern occupational education. Articulation, economies, curriculum, teacher training and cooperative education were only a few of the major topics under investigation and discussion.

In the instance of this particular text, the group assigned and listed below was concerned with the following:

COOPERATIVE EDUCATION

A. Objectives

1. Explore the potential of cooperative education for improving program quality and minimizing facility needs.

2. Determine instructional methodology and innovation in techniques.

3. Examine union-apprentice relationships and strategies for increasing cooperation.

B. Group Participants

Leader: Clarence Becker, Occupational Supervisor, BOCES, Nassau County, New York

Recorder: Richard Seguare, Chairman
Hotel, Restaurant & Institutional Management Div.
Agricultural and Technical College, Delhi

1. Deane T. Banker, Hutchinson Community College, Hutchinson, Kansas

2. D. A. Blackman, Redwood Road, Salt Lake City, Utah

3. Clement Bogaard, Board of Vocational Education, Chicago, Illinois

4. William Gooch, College of DuPage, Napierville Illinois

5. Raymond Hernandez, California Community College, Oakland, California

6. Roger Honeyman, Utah Technical College, Provo, Utah

7. Dr. Gerald James, Rockingham Community College. Wentworth, North Carolina

8. Oliver Koski, Gogebic Community College, Ironwood. Michigan

9. Albion Ringo, State Department of Vocational Education, Salem, Oregon

10. Lyle Wandrei, District #1, Technical Institute, Eau Claire, Wisconsin

11. Eugene Whitney, State Education Department, Albany, New York

This material, for the ease of the reader, will be organized with reference to the objectives previously stated. Additionally, a point by point conclusion will be presented, designed to encompass other areas peripheral in nature to the stated objectives, but germane to the subject itself.

I. STATED OBJECTIVE

Explore the potential of Cooperative Work-Study Programs for improving program quality and minimizing facility needs.

CONSIDERATIONS

A. Cooperative Work Study Program as a program description is a misleading title unto itself and, in fact, no one title is satisfactory with reference to conveying the essence of existing and emerging "Co-op" programs at the post-secondary level. It was concluded by the group that at least three forms of "Co-op Programs" are in existence in varying degrees and the clarification of these three is in order.

1. "Cooperative Work-Study Program" means the establishment of programs based on a work-study concept but geared to the basic idea of providing assistance employment. It is a program for post-secondary enrollees who are in need of financial aid in terms of self maintenance with reference to continuing their educational pursuits. It is a program focusing on suitable employment with the first objective being

earned financial aid. The second, and obscure element, is the practice of building in some articulation or parallels between the work experience and the academic program. Representative of this definition are numerous programs emanating from Federal legislation which have been most commendable, yet not designed to act as components of a given educational curriculum.

2. "Cooperative Work Experience Program" means the establishment of programs based upon a work experience concept and geared to the basic idea of providing for related learning directly correlated to the enrollee's educational pursuit and potential career selection. It is a program supervised and planned by the institution and participating approved employers so each may contribute to an effective and broader educational offering, an offering involving both formal instruction and employability understanding via paid employment experience.

3. "Cooperative Facilities Training Program" means the establishment of a program for which salary, financial support and employability assimilation are non-existent. Support of the existing institutional curriculum specializations is non-existent as well.

The above title refers to the development of programs wherein the sponsoring educational institution has no on-campus facilities for such an expanded educational offering and utilizes an "on location" facility instead. An example of the above would be best described as follows: Post-secondary Unit A identifies the career potential and enrollee interest in terms of offering a new program. The program might be to prepare students for the field of oceanography. Instead of not offering this opportunity because of lack of lab facilities and prohibitive costs, the Unit on a "co-operative basis" utilizes the lab facility of a nearby industrial plant involved with, in this case, oceanography. The educational unit designs the curriculum with the firm functioning as an advisor, and the institute utilizing the firm itself as its on-location teaching laboratory.

Unlike programs 1 and 2, this program does not include salary and work experience for the students. It is based on the utilization of a unique facility so as to extend the total program offerings of a given campus. This proved format is available to forward-looking post-secondary educational institutes.

II. STATED OBJECTIVE

Determine instructional methodology and innovation in techniques.

CONSIDERATIONS

A. Existing or potential patterns for "Co-op" Programs.

It should be quickly noted that there seems to be no one pattern of program implementation that is outstanding to the extent that it is universal in usage. The principle, i.e., the cooperative effort between the educational institution and industry, as a principle is the only common element.

Typical patterns that are in current usage are noted as follows:

1. The Half-day Pattern. In this instance, the enrollee spends one half of each educational day in two environments. The first is the formal on-campus instructional phase and the second is the on-location, work study, work experience or the industrial facilities training phase.

This method, as in the case of most others can be based on a time allocation as short as one day per week to as long as 5 days per week for a full year. This is naturally dependent upon the educational emphasis of the design and intent of the program. In the instance of a work-study program, the enrollee may do well to not be involved during any part of his educational day. If, however, the program is based on the "Cooperative Facilities Training" concept, he might be involved extensively and for a much longer period of time.

2. Week in - week out, month in - month out, semester in - semester out. Each of the foregoing refers to the same type of a system of formal In-house instruction, rotated with "field cooperative work experience". The consensus of the group participants was that the month and semester in-out patterns were not very satisfactory because of the difficulty of continuity between formal instruction and "field cooperative work experience".

3. Directed summer co-op experience. Some institutions have developed a rather high degree of interest with reference to the utilization of "summer co-op" as it would relate directly with the student's formal education program. Though the effort was recognized as a valid attempt, the group felt that because of the lack of educational control and guidance the program might not match up to the projected outcomes, or educational expectations.

B. Instructional Techniques and Methodology. Typically, any early forms of educationally oriented co-op programs included two basic areas of instruction:

1. Technical or Trade Related Instruction designed to instill within the learner those skills necessary for the operational aspects of his occupational selection and vertical mobility.

2. Social or General Related Instruction designed to develop the attitudinal or behavioral skills essential in terms of successful entrance into the career selection and

continued growth in the field.

On the basis of our limited investigation, it was rather clearly evident that Item 1 above was the prime, and sometimes only, element in the programs discussed at the two year and community college level. If this finding is, in fact, generally true, then it leaves much to be desired with reference to the total value of programs which have as their main emphasis, the preparation of youth for entrance and acceptance into today's working environment. This apparent missing element will take on even more significance as additional attempts are made to provide post-secondary opportunity for an expanding vertical population. It has become self-evident that much more attention must be given to the attitudinal development and employability phase of instruction.

The question of qualified leadership and trained personnel again raised the issue of high or low quality programs. At the secondary level, all approved programs are under the supervision of specially trained, certified cooperative teacher coordinators. This appears to not be the case in most post-secondary units. More often than not, the programs are based on a reactive basis, i.e., spurred into being because of immediate need, as against being pre-planned and properly implemented.

III. STATED OBJECTIVE

Examine union-apprentice relationship and strategies for increasing cooperation.

It should be noted at the outset, that the study group addressing itself to this question was not in essence prepared to discuss the objective to the extent of making recommendations. The participants in this instance had had little or no experience with reference to resolving some of the inherent problems in the above. Various concerns were raised and roadblocks to the "Co-op" idea presented as related to union-apprentice relationships. The following is representative of the disussion.

1. More youngsters move from high school vocational co-op programs into apprenticeship arrangements than from two year post-secondary programs. The main reason for this is thought to be the fact that co-op is not a total form of training in most post-secondary programs. More often the training provided by the two year college takes a youngster beyond the level of trade apprenticeship programs.

2. The discussion of unions led to the general conclusion that up to this time most of the liaison and cooperation has occurred on the local level. This, therefore, has led to a kind of solid acceptance in one area and no articulation in another area, even though very nearby. It was commonly agreed that educators must do a great deal more and do

it on state and national levels in order to have a wide range effect in terms of gaining support for cooperative education programs.

CONCLUSION

All participants readily agreed that the principles of "Cooperative Activity" utilized in various ways and for varying purposes, has tremendous potential for post-secondary institutions. It would appear that much more has to be done in the area of pilot design and the construction of models that can be utilized in other compatible settings.

There is a good deal of difference between the needs of youngsters in institutions when discussing patterns for urban, suburban and inter-city programs. This will quite naturally bring about the need for development and experimentation with several demonstration models. Additionally, a comprehensive survey of present applications as well as the literature will have to be initiated.

It was generally concluded that most programs in operation today have been hurriedly established and in too many cases not established with reference to solid grounding, based on adequate educational methodology and planning. Pointed out as well was the fact that too often the conducting of programs has been the responsibility of untrained rather than trained qualified co-op program personnel. It is with postive anticipation that this discussion group concluded its report and filed this report.

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

STUDY GROUP F REPORT

Leader: Mr. Lawrence E. Gray, Chief
Bureau of Two-Year Colleges
New York State Education Department
Albany, New York

Recorder: Daniel Moskwa, Chairman
Vocational Education Division
Agricultural & Technical College, Delhi

Charge to the group

1. To examine facility requirements for programs in vocational education.

2. To examine the utilization of multi-media presentations and the adaption of hardware to the instructional program.

It should be noted that this report represents the thinking of a group of men who worked together to attempt to meet the challenge of the questions posed. In the process, they made my task as study group leader easier and more enjoyable. My thanks to each of the contributors, who are listed below.

C. Allen Paul, Grossmont Junior College, California

Ronald F. Marlier, Sauk Valley College, Illinois

John M. Adams, Jr., Harland Area Vocational School, Kentucky

John Schwetz, West Shore Community College, Michigan

Louis E. Saavedra, Albuquerque Technical-Vocational Institute, New Mexico

Kenneth Oleson, Department of Community Colleges, North Carolina

E. Jerome Kern, Bureau of Community Colleges, Pennsylvania

1. Examine facility requirements for programs in vocational education.

In discussing this question, it became evident that the formal presentations made by the consultants to the conference had struck several responsive chords. The result was that the group identified two principles that should guide facilities planning for vocational programs:

a) It is highly desirable to bring vocational students into contact with other students in the community college. Total college facilities should, therefore, be designed with this "mixing capability" in mind.

b) No single pattern of construction or plant layout will fit all institutions and so attention will be given primarily to qualitative considerations rather than quantitative parameters.

It is recognized that economic factors affect the ability to carry out the optimum degree of the recommendations of the group. Such recognition should not, however, preclude the use of a comprehensive approach to planning.

The suggestion was made that the group create an "egg chart" indicating both functional relationships and flow of steps in the planning process. Coupled with this flow chart is a second chart which indicates the implementation pattern of the first chart and points at which decisions are required in order to continue the process.

Following these two charts, the group created a Facilities Space Use Checklist. It is believed that a list of this sort will help to reduce omissions in considering space needs.

Particular emphasis has been placed on a tri-partite input from faculty, students, and administration in the decision-making process. The group felt strongly that many of the undesirable features which existing facilities have are due to the lack of involvement of faculty and students in the planning process.

These three items are appended.

2. The utilization of multi-media in instructional programs.

There was general agreement that multi-media utilization has suffered a good deal from an over-application of the word "innovation" and an under-whelming practice of genuine innovation. The group identified three problem areas in developing multi-media:

1. Creation - of an appropriate plan for use
   - of the appropriate hardware and software

2. Validation - of the plan for use
   - of the need for use
   - of the effectiveness of use

3. Implementation - of the plan
   - by faculty and students
   - for long enough periods of time to permit accurate evaluation

In addition, it was postulated that too few four-year institutions are being used for assistance in developing multi-media at the two-year level.

There are four conclusions with which the group could identify:

1. In-service and pre-service training programs are the keys to effective use of multi-media by faculty.

2. Open door students use is an essential feature to the effective utilization of multi-media.

3. Professional media personnel must be available to aid faculty and students in using hardware and creating software.

4. Administrative support is essential for the success of a program of multi-media adaptation.

There are two signficant statements which the study group felt strongly should be amplified.

1. By and large, the limited effective use of multi-media has been caused by a lack of identification of the positive values which accrue to the users. Too often the excuse of ignorance or incompetence of the potential user has been used to avoid signif-cant involvement with such learning-expanding tools.

2. There is a significant lag between availability of hardware and the utilization of existing media. Before pressing onward to newer media creations, there is an urgent need to use more widely and effectively that which exists.

The following are the situation descriptions and the recommendations of study group F:

SITUATION

1. Unevenness of use
2. Limited equipment (numbers, variety, accessibility,

blanket security)
3. Limited software
4. People ignorant of use
5. Lack of facilities for use and preparation
6. Common-law marriage to equipment which is out-dated
7. Lack of professional assistance in the creation of software
8. Lack of adequate maintenance of hardware
9. Omissions in facility plan (space, services)
10. No or limited budget available for faculty use
11. Little relation of need to selection of hardware
12. Administrative support (too much, too little)
13. Lack of community involvement in utilization

RECOMMENDATIONS

1. Instruction-hands on, with small groups/single topic
2. Good motivational demonstrations
3. Motivation from other sources
4. Identification of subject matter applications
5. Utilization plan
6. Agency resources to assist local staff
7. Formal course in materials production (school sponsored)
8. Establish faculty committee on instructional improvement
9. Multi-media utilization should be directly related to instructional activities and so stated in the institutional philosophy
10. Media should be accessible to: students, staff, community groups
11. Employment support personnel (professional, other)
12. Descriptive inventory of institutional and community resources (speakers, films, field trips)
13. Integrated use of multi-systems

APPENDIX A

GROUP F

Session #1 - June 23, 1969 - 10 participants

TWO OBJECTIVES FOR GROUP F CONSIDERATION

1. Examine facility requirements for programs in vo-ed.

2. Examine the utilization of multi-media presentations and the adaptation of "hardware" to the instructional program.

MULTI-MEDIA PRESENTATION DEFINED

1. Everything in the classroom except the teacher.

2. Everything in the classroom including the teacher.

3. More than one type of teaching aid used in one presentation, etc.; printed; film, slides, etc.; demonstration materials; TV; etc.

Discussion centered on the value of exploring the listed items most of which are currently in existence.

American Council of Research looks at technical and vocational media every 8 years. Concluded that the only advantage of use of multi-media was the retention of students and interests and not in saving time.

The media-specialist and the instructors must be brought together to motivate the instructors to use the media.

FACILITIES - QUESTIONS POSED FOR CONSIDERATION

1. What kind of library should be built for an almost purely vocational school? Size, etc.?

2. How is the total library visualized as part of the instructional program?

3. Central vs. individual libraries.

4

Session #2 - June 24, 1969 - 13 participants present

ITEMS SUGGESTED FOR CONSIDERATION

We should come up with some sound general guidelines for facilities.

a. Suggested discussion on facilities to obtain maximum mixing of all students.

b. No one pattern to fit all institutions. Centralized vs. decentralized.

Suggestion to use Delhi as a basic approach to study and to develop planning around this institution.

CHARETTE - Government funds available for multi-disciplinary planning through inter-community development.

There is more to mixing students and programs than facility planning. There must be a total campus, faculty, student commitment to mix.

Economic factors dictate facility and mixing.

Change program titles so as not to sterotype vo-ed.
Ex.: collegiate technical, collegiate transfer.

DELHI - Academic Plan -- Developmental Plan -- Space Needs Study -- Implementation

EACH PARTICIPANT SHOULD PREPARE FOR NEXT SESSION

4 or 5 concrete suggestions to identify priorities for development and discussion in facility planning.

MULTI-MEDIA

In-service and pre-service training programs are the keys to implementing use of multi-media.

The real use of media is an open door policy for student use of classrooms and labs.

A full-time specialist in the use of media should be employed to augment the faculty.

New faculty should be given an orientation and pre-service training in use of multi-media on the new campus.

THREE PROBLEM AREAS IN DEVELOPING MULTI-MEDIA

Creation

Validation

Implementation

"BACKSTOPPING" BY 4 YEAR INSTITUTIONS

Utilize 4 year institutions to aid 2 year colleges in research, planning and developing of the use of multi-media and development of vo-ed post-secondary facilities, etc.

Session #3 - June 25, 1969

DEVELOPMENT OF EGG CHART #1

I. NEED APPEARS

a. Manpower studies
b. National emergency
c. Industrial request
d. Student request
e. Vested interest groups
f. Self perpetuation
g. Serendipity (studies)
h. Technological change

II. AUTHORITY - DECISION MAKING BODY (IES)

a. Power structure
b. Validation of needs-resources and priorities

1. Information analysis

III. SELECTION OF INSTITUTION TYPE

a. Power structure

1. State plan

b. Relation to existing institutions
c. Nature of the local economy; financial resources
d. Growth potential or longevity programs
e. Relation to need

IV. DETERMINE INSTITUTIONAL PURPOSES

a. (see page 172)

V. DETERMINATION OF PROGRAMS

a. Relationship to needs and resources (financial, human, local, economy, space)
b. Input from Advisory Committee
c. Flexibility of curricula (cluster, core)
d. Reaction time - start-up

e. Licensure requirements

VI. EDUCATIONAL SPECIFICATIONS

a. Instructional staff, input
b. Occupational requirements
c. Advisory Committee recommendations
d. Consultants recommendations
e. Regulating agencies requirements
f. Students
g. Professional societies
h. Supportive services
i. Facilities requirement factors

1. Flexibility of construction
2. Current projected student numbers (FT and PT)
3. Faculty size and distribution - administration size and location
4. Services (utilities, maintenance, security)
5. Techniques of instruction
6. Equipment (fixed and mobile)
7. Storage and preparation
8. Traffic patterns (on and off campus and within and without buildings, parking)
9. Media distribution
10. Environmental control
11. Outdoor laboratory space
12. Community use
13. Student (services, recreation, study) areas
14. Safety features
15. Library resources
16. Handicapped student requirements
17. Materials handling facilities planning
18. Communications
19. Residential facilities

Session #4

MULTI-MEDIA

WHAT'S WRONG WITH THE USE OF MEDIA TODAY?

*Identify positive value to staff and students.

*Identify lag between existing hardware and utilization.

SITUATION

1. Unevenness of use
2. Limited equipment (numbers, variety, accessibility, blanket security)
3. Limited software
4. People ignorant of use
5. Lack of facilities for use and preparation
6. Common-law marriage to equipment which is out-dated

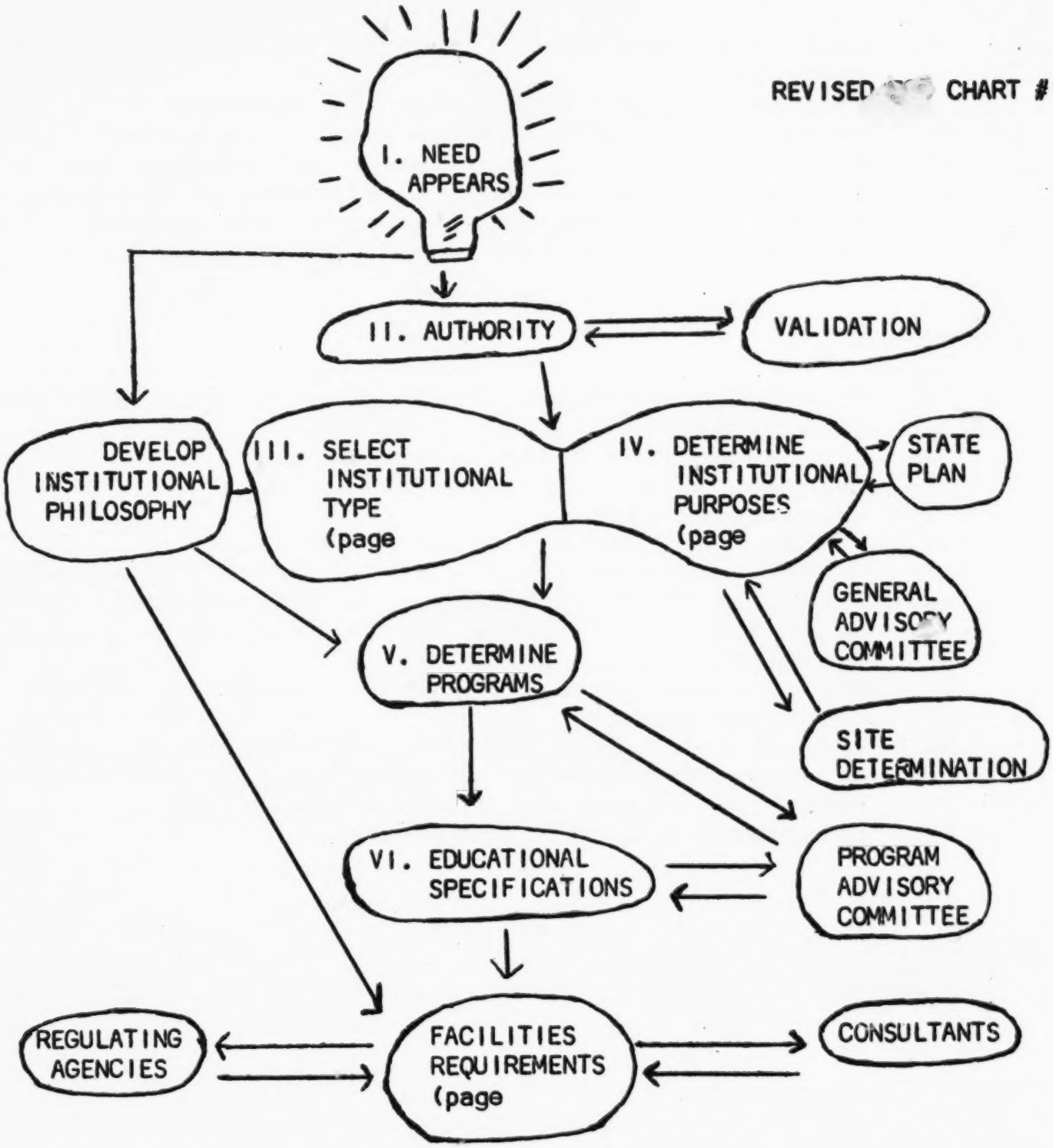
7. Lack of professional assistance in the creation of software
8. Lack of adequate maintenance of hardware
9. Omissions in facility plan (space, services)
10. No or limited budget available for faculty use
11. Little relation of need to selection of hardware
12. Administrative support (too much, too little)
13. Lack of community involvement in utilization

RECOMMENDATIONS

1. Instruction-hands on, with small groups/single topic
2. Good motivational demonstrations
3. Motivation from other sources
4. Identification of subject matter applications
5. Utilization plan
6. Agency resources to assist local staff
7. Formal course in materials production (school sponsored)
8. Establish faculty committee on instructional improvement
9. Multi-media utilization should be directly related to instructional philosophy
10. Media should be accessible to: students, staff, community groups
11. Employment support personnel (professional, other)
12. Descriptive inventory of institutional and community resources (speakers, films, field trips)
13. Integrated use of multi-systems

APPENDIX B

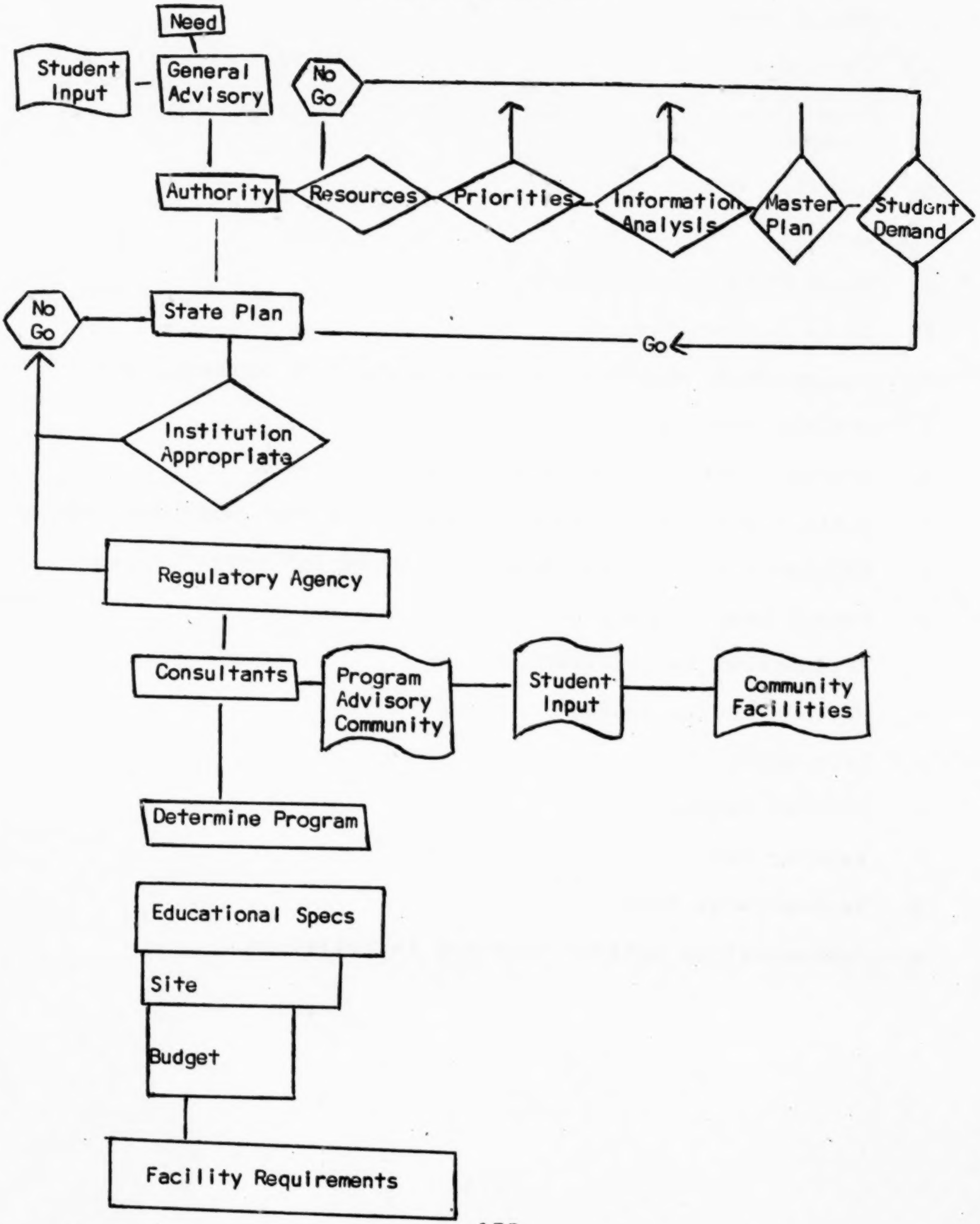
REVISED CHART #1



APPENDIX C

POSSIBLE IMPLEMENTATION OF THE EGG CHART #1

by Louis E. Saavedra



APPENDIX D

GROUP F

FACILITY SPACE USE CHECKLIST

A. Office Space

   Administrative, faculty, records, registrar, business services, admissions, public information, he lth ser vices, reproduction, clerical and secretarial, supply storage, student services

B. Guidance and Counseling

C. Lecture - Classroom

D. Large Lecture/Auditorium

E. Lecture-Demonstration

F. Laboratories and Shops - (with projection screens, etc.)

G. Seminar-small group

H. Instructional Storage and Preparation Rooms

I. Field Laboratories (outdoor facilities for surveying, etc.)

J. Maintenance - General Maintenance and Equipment Repair

K. Power, heat, light, etc.

L. Residential Facilities

M. Media Resource Center

N. Library

O. Student Center

P. Parking Lot

Q. Recreational Area

R. Communication Systems (central installation)

Three Examples of Multi-Media Utilization

(Supplied by members of Group F)

I. The Engineering Technology Department at Grossmont College used all media available on campus --

Dual-rear projection front view
16 mm motion picture
35 mm slide carousel
Tape records
Two front view, front projection screens
w/ 16mm and 35mm

to produce a fast moving orientation to technology for 60 high school students. A local industrialist contributed $1,000 to put this program together. Field trips and lectures were also involved in the total experience.

The media techniques included simultaneous dialogue (tape), music (emphasis and background), flashing slides, standing slides, and motion picture action.

The program was a historical showing the growth of technology beginning with the time when the parents of these students were their age and depicted major historical events, music evolution and dress and so on.

The kids loved it and were in the main much impressed. (As was the staff).

II. A small control unit is now for sale that will connect a tape recorder to a carrousel projector.

This unit will introduce an electronic signal on the tape so that when the tape is being played this signal will cause the projector to automatically change slides.

Thus, it is possible for an instructor to take pictures with a 35mm, have slides produced, record his own lecture on the tape, and index the tape with this special unit. This process will produce a syncronized tape-slide presentation.

At any future date the instructor can update his presentation by inserting new slides and editing the tape.
(Norelco Product)

III. Many persons lack the confidence in their mechanical ability to remember how to use duplication equipment following a demonstration and not wishing to expose their

ineptness, claim that various media are of no use in their subject.

I have experienced success in getting these persons to use various pieces of equipment by holding instruction for small groups (4 to 6) on only one device or method and requesting each instructor to develop a unit in which easy to produce materials would be produced for them. During the second meeting of the group, after 4 or 5 guided sessions which are of a workshop nature, the instructors gain enough confidence and skill that they will continue to use the newly acquired skill.

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

STUDY GROUP G REPORT

Leader: President Charles W. Laffin, Jr.
Agricultural and Technical College
Farmingdale, New York

Recorder: Robert Kopecek, Associate Dean of Faculty
Agricultural and Technical College
Delhi, New York

Objectives:

1. Identify strategies for accommodating students requiring housing facilities

2. Determine the counseling needs of students

Participants:

Dr. A. S. Bevacqua, Department of Community Colleges, Raleigh, North Carolina

Dr. Michael Fichera, New Jersey State Department of Education, Trenton, New Jersey

Mr. Wendell Howard, Area Technical Institute, Granite Falls, Minnesota

Mr. L. S. McKinney, James Rumsey Vocational-Technical Center, Martinsburg, West Virginia

Mr. Clarke G. Hoffman, Dean of Students, State University Agricultural and Technical College, Delhi, New York

Mr. Donald Jones, Director, Vocational Division, State University Agricultural and Technical College, Alfred, New York

Dr. William R. Kunsela, President, State University Agricultural and Technical College, Delhi, New York

Introduction

The dimension of student housing did not loom large in the spectrum of discussions at the National Institute on post-high school vocational-technical education programs. However, this factor of post-high school or collegiate life can be and is a significant area of opportunity for the expansion of college-level, college-age, vocational-technical education. Of the four consultants, who presented their college models in post-high school vocational education, only one, Mr. Donald Jones, Director of Vocational Education, Agricultural and Technical College, Alfred, N. Y., included reference to the problem of housing post-high school vocational students in his initial morning presentation. The lack of attention to this factor did not deter the study group from vigorously investigating reasons why post-high school education can be improved through proper utilization of planned student housing.

In the second objective, that of student counseling, each of the presenters included in his basic remarks the significance and importance of the guidance and counseling functions in the improvement of teaching and learning in post-high school vocational programs.

Organization

This report will attempt to organize its focus around the objectives with the following structural outline in mind:

a. What is the current status of the topics as observed in practice and evidenced by the presentations given in the morning sessions by the consultants?

b. What are some of the factors which tend to become problems in the implementation in the factors of housing and counseling in post-high school vocational education?

c. What are some of the possible solutions to these problems?

d. What recommendations could be made as outcomes of the group study discussions?

Each of the two objectives - that of student housing and student counseling were dealt with separately in the discussions. This report reflects the focus of attention as the discussions were carried on and in the sequence in which the study group concentrated attention on the objectives assigned.

I. Student Resident Functions and Values

Student resident facilities on two-year college campuses, especially when a total statewide plan of post-high school vocational education expansion is being considered, provide

several distinct advantages.

A college with dormitory or resident housing and feeding facilities: (a) has the capability to serve students from all over the state in special curriculum areas. This point is of great importance where the program, for a variety of reasons, should and could be offered only at one institution in the State. (b) has the capability of taking disadvantaged students out of poor home conditions and educating the total individual in a somewhat controlled environment. In this regard, it allows the students to be involved in community dining, group action and living and study areas and participation to a greater extent in the campus community life of the college. (c) can make possible a much more extensive and intensive student counseling function than is available in a commuting situation. This dimension of campus living affords an opportunity for "total" education of the student in regard to his personal health and development, to his guidance in both the vocational as well as personal and academic aspects of his study and self-improvement.

In the New York State two-year college plan, examples of the need for residence capability at one or more of the two-year technical colleges is evidenced in the example of the program at Delhi Tech in Animal Science, Laboratory Animal Assistance. This is the only program of its type in the state and if students from out of the Delaware County area desire to take this program of study, the ability to house them is required. The State University Technical College at Farmingdale is the only unit to provide curricula in Aviation Mechanics and Pilot Training. It draws from all over the state for these programs.

There is much indication that adverse home environment, particularly in disadvantaged areas, whether they be urban or rural, provides a poor study base for high school graduates in any continued study. The campus residence and dining areas and where the availability of the campus health and guidance services are convenient, the student has an opportunity for greater growth than possible in the commuting concept.

These strengths of providing statewide availability of unique programs and greater social, personal health and counseling characteristics for the students however, are more than matched in terms of the problems and liability of providing campus living facilities. The study group identified the following as some of these difficulties and liabilities which mitigate against the expansion of campus type two-year colleges in many state plans for post-high school vocational and technical education. The initial cost, continuing staffing, the complexity of food service, the provision of around-the-clock health and security services present a strong series of obstacles to the justification of building dormitories and dining halls in public institutions. The image of the tradi-

tional "private residential college" is attached to colleges where the students attend classes and live on the campus.

The problem of full utilization of residence halls and dining facilities on the year around basis is a deterrent in the planning new higher educational facilities. For many years, the typical residential college dormitories stood idle through the summer months. This is a problem of year round campus utilization closely tied to calendar experimentation and full utilization of facilities. The matter of college administration and faculty involvement in the total life of students in a residential context and the age-old matter of in loco parentis also discourages expansion of responsibility for the total student study and social life in a campus residence concept.

The complex problem of providing housing for post-high school vocational students when college constructed residence halls and dining halls were not available was highlighted for the study group by Mr. Donald Jones, Director of Vocational Center, at Alfred Agricultural and Technical College. Since the Wellsville campus is removed from the main campus of Alfred-Tech. and serves a much wider area of student accommodation than can be covered by daily commuting, the Wellsville campus has faced the problem of housing a great many of its students in the homes and buildings of the community. Supervision, assurance of quality, problems of community relations all were lively matters of administrative concern in the development of the Wellsville Vocational Program.

To the following questions, he gave these answers:

a. How was housing obtained for students?

Community organizations were contacted and appraised of the housing needs. These organizations in turn were asked to cooperate with the college in securing individual landlords. The college established a housing list called the List of Available Housing. All housing on this list are inspected; but, because no statewide guidelines or directives are available specifying requirements, local norms were established. The local building inspector is also notified if a single resident unit houses more than five students. Mr. Jones indicated that the operation of housing students is one of the most difficult administrative problems in the Wellsville operation. In this regard Mr. Jones has not been able to identify any specifically stated responsibilities in the area of housing mandated by the State. He, therefore, concluded that there is at least a moral responsibility which the college attempts to meet by inspecting all facilities and by asking students and parents to look at the facilities before entering into contractual arrangements.

A statement developed by Corning Community College

relative to the reciprocal responsibilities of student and landlord is also used with some success. Mr. Jones indicated that if any college attempts to provide housing facilities in an area not previously accustomed to student residence, the local people should be involved in the process of site selection to eliminate fear and conflict.

b. What differences, if any, exist between commuter and resident student?

In general, Mr. Jones indicated that there was no major difference academically in the vocational area. The commuter student, however, is not tied down to the campus for social activities and, therefore, does not participate in these activities to any great extent. In the experience of Mr. Jones, there does seem, however, to be a difference between commuter and resident students in technical curricula.

Much of the reason for justifying dormitories on public vocational oriented college campuses is evidenced in a similar fashion by the offering of vocational education opportunities to an area larger than can reasonably be traversed by daily commuting in public or personal transportation. The cost of this travel when exceeding a certain distance can equal or exceed the cost of living and dining in college provided residences and dining facilities. Space required and cost of adequate parking facilities are factors to be weighed in this matter of providing housing.

Recommendations

a. Residence Halls, in certain conditions, enable a state or a locality to serve a wider area of student enrollment than could be afforded in a reasonable commuting transportation situation. Where state-wide or area-wide support for a particular program is essential, the provision of residence facilities and dining facilities seems to be indicated.

b. There is considerable evidence that the total educational and personal welfare of the students can be effectively served in the "controlled" environment of campus living afforded by residential capabilities.

c. In statewide planning for expanding vocational education, provision for the inclusion of residence capacity should be made. Provision for financing the construction and maintenance of these facilities and, in instances, subsidizing the cost of these on the part of the students should be considered in order that those who may benefit by the programs will be able to afford to.

II. Student Personnel Services

While keynoters reporting on post-high school vocational education models on the national scene evidenced little concern for housing provisions, each allotted a major portion of his comments and discussion to the importance of "guidance and counseling" of students. Loosely used, the terms are often interpreted as "directional advisement." In arriving at an acceptable basis for discussion the following concepts of counseling were introduced:

Counseling can be described as a learning process in which the relationship of counselee to counselor differs significantly from the teaching relationship of the student to faculty member. The counselee determines the content of material to be learned in counseling. The counselee's perception of himself, his values and his needs are the primary concern of the counselor. Students and faculty may determine the learning experiences for the classroom; however, their decisions must give first allegiance to group needs and values.

Because of limitations and the technical difficulties in distinguishing between advisement and counseling and other ancillary services provided by colleges, the group endorsed the general notion that two-year community colleges, technical institutes or junior colleges, including post-high school vocational education programs should provide well-rounded programs of Student Personnel Services.

The discussion considered these services in their broadest sense, focusing on the following questions:

a. How well do we or should we support student services?

b. What methods or strategies are available to get data about our students?

c. Where can counselors who possess empathy for vocational students be obtained?

Relative to the subsequent questions, the following points were made in the day's discussions:

A system of advisement and outreach seems to be the key in getting students interested in vocational programs. Techniques such as mobile counseling vans, busing students to campus, arranging for systematic visits to the campus by students and parents, educating the faculty, staff and students of the institution to recruit new students, generating publications that are appealing and sensitive to the needs of students in eliciting the aid of high school teachers and counselors.

Recognizing that career planning and a career choice is a long-term process rather than an event, every state should consider a program of vocational education that begins in the

eighth or ninth grade and extends through the secondary school years. The North Carolina model, which begins a series of vocational courses in the ninth grade level seems to meet a real need. This course is broad and deals with the world of work in stressing the dignity of work. The course is then followed with more specific courses in more narrowly defined areas in the tenth, eleventh and twelfth grades.

To train or retrain counselors and high school teachers, some types of statewide programs are desirable. Successful in this field are seminars for counselors funded by the state and sponsored by technical colleges. The programs consist of occupational experts, former vocational students, and plant visitations designed to make counselors and teachers more sensitive to the problems of vocational education.

Because professional counselors, at the present time, receive little formal training in occupational information, graduate schools of education should be advised and urged to strengthen this particular facet of counselor education.

A student's entry into a vocational education program is dependent in a large part on the attitudes of parents and high school counselors. A strong plan or program to educate parents in the values and benefits of occupational education is necessary, ideally on the state level.

Educators must recognize that counseling occurs in many places outside of the school, i.e., welfare offices, employment offices, and certain church organizations. Therefore, it is necessary to orient these other sources of counseling

Recommendations

To effect maximum benefits from a strong student services program in a particular institution, internal flexibility of program must be maintained.

A well organized, staffed and functioning Student Personnel Services program for post-high school vocational education should include provisions for:

a. Machinery and instruments for obtaining data significant to the students' learning characteristics through records, admissions testing, personal data inventories, interviews, teacher ratings and conferences with qualified staff.

b. These data should be maintained in an up-to-date manner and in available form for staff and faculty.

c. The post-high school vocational technical education programs should be provided with qualified counseling staff in a student ratio which would provide for adequate counseling at entrance, in-study period, drop-

out interviews, placement and follow-up of graduates.

d. Physical facilities should be provided for proper comfort, privacy, storage and accessibility of data, secretarial assistance, and administrative personnel.

Conclusion

Proper housing for resident students who seek post-high school vocational education at institutions beyond commuting distance from their homes should be provided. This may be done through the erection of dormitories or through approved supervised off-campus housing accommodations. Consideration of providing a residence capability ought to seriously be undertaken in any statewide planning for expanded post-high school vocational programs.

A broad based, well conceived, adequately staffed and equipped Student Personnel Services program is essential to effective selection, counseling and teaching students in vocationally oriented educational programs, particularly on the post-high school level.

These services should consider capability to evaluate student abilities, provide proper guidance and counseling and advisement programs, health and placement services for the students.

Both of these significant factors - Housing and Personnel Services, while costly in facilities and personnel, are critical to the efficiency, effectiveness, and productiveness of vocational education programs beyond the high school.

National Institute
On
Improving Vocational Education
In Post-High School Institutions

State University
Agricultural and Technical College
Delhi, New York

June 22 - 27, 1969

CONFERENCE WRAP-UP....EXPECTATIONS AND ACCOMPLISHMENTS

Kenneth T. Doran, Associate Dean
Two-Year and Technical Colleges
State University of New York

Don't prepare to patiently reconcile yourself to a long speech. It's carefully timed. My script says at this point, pause for a wild ovation.

I am convinced that any wrap-up speaker cannot more adequately do his job simply by lengthening his presentation. Hence, I've opted for the short speech. And besides Earl Mac Arthur let me peek at the evaluation sheets. Wow, what some of you people said about banquet speakers. When you are sheltered by anonymity you really give vent to your feelings. President Bill Kunsela maligned me at the very outset of this conference. Someone at our lunch table said to President Kunsela, "I see Doran is going to make the wrap-up speech. Says Kunsela quickly, "Oh, that's no job for him, he has only one basic speech anyway. He had the wrap-up speech for this conference all prepared before he left Albany". I sputtered a bit, naturally. I'm sure I'll never convince Bill I never put pencil to paper until this morning after President Wilber's presentation.

I approached this wrap-up with considerable twanging of Dave Ponitz's puritan ethic of my native Connecticut Yankee nervous system. The Federal Government, in this year of surtaxes, appalling interest rates, and budget slashes, had committed a great deal of money under the Education Professions Development Act to bring us together from the length and breadth of the country as a national institute for, "Improving Vocational Education in Post-High School Institutions"... I was charged to expound the "expectations and accomplishments" which flowed from this institute and, moreover, to do it before the institute was completed...which isn't easy to do. I knew the latter factor was an expedient to accommodate our old friend, "logistics" Mac Arthur. Surely, if we waited until Friday morning half of our group would be in air flight to their return destinations. My conscience pangs were considerably quieted when Gary Thomas of the U.S. Office of Education,

Division of Vocational and Technical Education, happened to be a member of Study Group B. Early in our group deliberations he said, "You people seem to misapprehend our purpose in funding this institute. We did not feel that Earl Mac Arthur's project report, even though it was ultimately to be made available to the ERIC center at Ohio State University, was in any sense going to revolutionize vocational education nationally. The improvement in vocational education nationally, we saw rebounding from the effect the institute would have on you, the individual participants, when you returned to home base". And I say, this common sense approach assuaged most of my guilt feelings about any lack of profundity or sweeping national affect in my wrap-up remarks as USOE or the ERIC user might view them in the future. It also reminded me that this guilt phenomenon, on the part of educational participants, as to the real public and important impact of their conference deliberations, is not simply a modern phenomenon.

When General "Skinny" Wainwright's great, great, great grandfather...I may have one too many greats in there...I'm never too sure...at any rate his ancestor, Bishop Wainwright, of New York City, was addressing a convention of scholars in 1830 preparatory to the organization of what we know today as New York University...don't get it mixed up with State University of New York, please. He said, and I am paraphrasing from memory, "Some outside these convention walls" (they were meeting in the common council chamber of New York City at that time), "some outside these convention walls and even some here within are murmuring 'gueue bono'. He had a bunch of classical scholars there so he felt it was safe to use the Latin phrase for 'What good'. What good may be expected from these proceedings? What will be their practical effect in arts and letters and in the colleges which the participants represented? They were there...Justice Story was there from Harvard. Silliman was there from Yale and some of the leading lights of the age. Bishop Wainwright continued, "I say to the inquirers that it was never our purpose to presume to legislate for any institution much less society in general. The value of these proceedings lies in the opportunity for rubbing shoulders among the participants and being exposed to views which support or tend to refute our own. Thus, we learn". So, I am gratified with Gary Thomas' permission to be permitted to take Bishop Wainwright's approach and to wrap-up this here in terms of "expectations and accomplishments" for us as individual participants.

What are some of the things I learned here? You can double and redouble my list, I am sure..each one of you. First, I'll mention communication. It takes a while to establish communication with a group from varied geographic origins. In our study group, for example, the participants had to struggle with speech patterns and inflections from New York City, upstate New York, the suburbs of Delhi, Alabama, Arkansas, Maryland, Missouri, Oklahoma, Texas and Wisconsin. Carl Simeoli, who is a Bostonian transplanted to St. Louis, asked me last

night as we walked toward our dormitory, if I found it to be true as he did that after two or three days of exposure to new speech patterns one tended to pick them up. I said, "I certainly do, old boy!" And then it flashed through my mind that I picked up 'old boy' from John Talbott of Oklahoma who says constantly, "this little 'old boy' did this and that little 'old boy' did that".

Difficulty of communication reminds me of a World War II experience I had in London. I was on the underground, their subway, and the train started to slow down for a station stop. Two elderly British gentlemen next to me, apparently strangers to one another, appeared to be hard of hearing. As the train slowed one nudged the other, "I say, is this Wembley?" "Wednesday? No, it's Thursday". "Thirsty, so am I, let's get off and have a drink".

Another communications difficulty in a group of diversified state origins is definition of concepts. The group leader starts out: "Our first objective is to identify and review exemplary post-high school programs". Before he can proceed A says, "What's your definition of program, mister?" Mr. B says, "And post-high school?" and C says, "Exemplary, what do you mean by that?" Forty-five minutes later, after eye-bulging but friendly discussion, the group leader is ready to mention objective two for his group.

But I am over-magnifying communications problems. I really did learn some things. For one thing as Parker Wilber said this morning at one point, "We have the same old questions". Bill referred to that from '35 to '39, but we have different answers in terms of time. I am interested to learn if my same old questions have different answers in different parts of the country or is there a sameness out there which seems to reinforce my own thinking. I am interested in articulation of secondary and post-secondary programs chiefly, of course, from the latter point of view...post-secondary. Gene Masucci, down there from a BOCES operation on Long Island, is interested from the secondary point of view, so is Don Simmons from the Area School in Springfield, Missouri. So we share viewpoints to our mutual benefit.

I am interested in questions of curricular comprehensiveness in our colleges. President James, of North Carolina, tells us that his state reached a conscious decision to fuse junior college types of institutions and technical institute types into a single system of comprehensive colleges.

I am interested in formulas for state fiscal support for operating community colleges. New York State puts in one-third. President James says that North Carolina has moved from one-third to sixty-five per cent state input. President Wilber says that in California the state share, on the average, is 25 to 35 per cent and at his own institution 16 to 17 per cent. I'm interested in capital support ratios in community

colleges. New York State pays 50 per cent of building costs for community colleges. North Carolina leaves the responsibility entirely to the local area; no state support.

I'm bothered about student attrition in our two-year colleges. We find it very difficult to quantify with any precision. North Carolina finds the same difficulty. Dave Ponitz introduces a term I'll add to my vocabulary....the phantom student...which is a factor of attrition.

I'm interested in the question, should general education be a component of every vocational and technical curriculum? New York State says,"Yes", by Regents policy for technical curriculums. Don Jones is trying vocational curriculums without general education at Wellsville. North Carolina requires it in both vocational and technical.

I could continue combing my voluminous notes, and I have the suitcase full that you described, Bill, ..but I promised a short speech. Twelve minutes and I'll stop.

I don't want to consider this conference wrapped up, however, before asking you to give Earl Mac Arthur and our Delhi hosts a rising vote of applause for their solicitous care for us during the past four days. And, thank you very much.

APPENDIX B

FORMS AND MATERIALS

April 23, 1969

Dear

"Improving Vocational Education in Post-High School Institutions" is the theme of a national institute to be conducted at this College, June 22 through 28.

Supported by a grant from the U. S. Office of Education, Bureau of Research, the primary objective of the institute is the exchange of ideas among the several states for implementing the Vocational Education Amendments of 1968.

Conference participants will be asked to serve on task forces to determine specific strategies for improving post-high school vocational education. Grant funds are available to support round-trip travel, lodging and subsistence for _____ representatives from your state. Other interested persons may attend the conference on a non-reimbursable basis at the rates listed on the pink application form. Please distribute the enclosed forms to your nominees.

Stipend recipients should be selected from the following list:
Administrators of Post-Secondary Programs
Teacher Educators
Post Secondary Guidance
Representatives of Industry
Directors of area vocational schools
State Directors & Supervisors of Vocational Education
City Superintendents of Schools

Applications should be received in this office not later than May 24.

Complete travel and program information will be sent to accepted applicants.

New York Assistant Commissioner for Vocational Education, Robert Seckendorf and State University Vice Chancellor for Two Year Colleges, Sebastian Martorana join in extending this invitation to participate in this institute.

Sincerely,

W. R. Kunsela
President

E. W. Mac Arthur
Project Director

Encs.

State University
AGRICULTURAL AND TECHNICAL COLLEGE
DELHI, NEW YORK 13753

PRELIMINARY PROGRAM
NATIONAL INSTITUTE

IMPROVING VOCATIONAL EDUCATION
IN POST-HIGH SCHOOL INSTITUTIONS
U. S. Office of Education Grant #9-0329
JUNE 22 - JUNE 27

JUNE 22 Arrival and Registration (1:00 - 6:00 p.m.)

JUNE 23 Institute Opens (9:00 a.m.)

Morning sessions of the institute will be presentations by four post-high school institutions, describing the vocational education programs now being conducted.

Each presentation will be directed to administrative organization, curriculum development, student selection, facilities and financing.

A question-answer period will be held at the conclusion of each presentation.

The following individuals will make presentations:

Dr. Gerald James, President
Rockingham Community College
Wentworth, North Carolina

Mr. Donald Jones, Director
Vocational Division
Agricultural and Technical College
Alfred, New York

Dr. David Ponitz, President
Washtenaw Community College
Ann Arbor, Michigan

*Mr. F. Parker Wilber, President
Los Angeles Trade and Technical College
Los Angeles, California

*Pending

Afternoon sessions Monday through Thursday and Friday morning.

Seven study groups will meet to develop recommendations for achieving sixteen specific conference objectives related to post-high school vocational education.

AFTERNOON SESSIONS

GROUP A
Long Range Planning and Manpower Projections
Leader - Prof. F. F. Foltman
School of Industrial & Labor Relations
Cornell University

GROUP B
Review and Development of Vocational Education Programs
Leader - Dr. Kenneth Doran
Associate University Dean for Two Year Colleges
S.U.N.Y.

GROUP C
Planning for Balanced Vocational Offerings
Leader - Dr. James Fitzgibbon, President
Hudson Valley Community College
Troy, New York

GROUP D
Staffing Requirements and Teacher Training
Leader - Dr. David Huntington, President
State University Agricultural & Technical College
Alfred, New York

GROUP E
Instructional Methodology & Innovation in Vocational Education
Leader - Dr. Murray Block, President
Manhattan Community College
New York City

GROUP F
Facility Requirements and Multi-media Utilization in Vocational Education
Leader - Mr. Lawrence Gray
Chief of Bureau, Two Year Colleges
State Education Department
Albany, New York

GROUP G
Student Housing and Counseling Needs
Leader - Dr. Charles Laffin, President
State University Agricultural & Technical College
Farmingdale, New York

Conferees will be placed in one of the study groups on a random selection basis. Assignments will be indicated at the time of registration on June 22.

STATE UNIVERSITY
AGRICULTURAL AND TECHNICAL COLLEGE
DELHI, NEW YORK 13753

DIVISIONS
Agriculture
Business Management
Construction
General Studies
Hotel, Restaurant and Institution Management
Continuing Education

May 9, 1969

NATIONAL INSTITUTE

IMPROVING VOCATIONAL EDUCATION
IN POST-HIGH SCHOOL INSTITUTIONS

M E M O R A N D U M

TO: State Directors of Vocational Education

FROM: E. W. Mac Arthur, Project Director

On April 24, 1969 we mailed you our announcement concerning a national institute to be held at this college, June 22-27, 1969.

The enclosed materials indicate the scope and content of the institute program.

This is a friendly reminder, if you have not done so, to distribute the application forms to appropriate persons in your state.

Applications for grant support are due May 24. (Support includes lodging, meals and round-trip travel).

Please mail early so that each state is represented and the institute is a successful one.

Thank you for your attention.

EWM-500 5/8/69

STATE UNIVERSITY
AGRICULTURAL AND TECHNICAL COLLEGE
Delhi, New York

NATIONAL INSTITUTE
IMPROVING VOCATIONAL EDUCATION
IN POST-HIGH SCHOOL INSTITUTIONS
June 22 - 27, 1969

CONSULTANTS AND STUDY GROUP LEADERS

MORNING SESSIONS:

Dr. Gerald James

President, Rockingham Community College
Wentworth, North Carolina

Dr. James received his Ed.D. from the University of Illinois and the B.S. and M.S. from North Carolina State. He has served in North Carolina as a teacher of agriculture and professor of vocational education at North Carolina State. In addition, he has held the post of Associate Director, Department of Community Colleges in North Carolina and prior to becoming president at Rockingham, he served as North Carolina State Director of Vocational Education.

Dr. David Ponitz

President, Washtenaw Community College
Ann Arbor, Michigan

Dr. Ponitz received his Ed.D. from Harvard and his B.A. and M.A. from the University of Michigan. His career started as a public school classroom teacher, moving successfully to a high school principalship, superintendent of schools, Freeport, Illinois, and the presidency of Freeport Illinois Community College. He also served as a consultant to the Boston School Survey. Dr. Ponitz also is affiliated with The National Advisory Board AAJC, New Institutions Project; National Advisory Board ACT; and serves as vice president, Michigan Council of Community College Administrators. Presently he is a member of the editorial advisory board Nation's Schools.

Mr. Donald Jones

Director, Vocational Division
Agricultural and Technical College
Alfred, New York

Mr. Jones received his masters degree from Alfred University and holds a B.S. from Cornell University. He is also a graduate of the Agricultural and Technical College at Farmingdale, where he was awarded the A.A.S. degree. Mr. Jones has served as a teacher of agriculture and prior to becoming Director of Vocational Education, served as professor of agronomy.

MORNING SESSIONS (Cont'd)

Mr. F. Parker Wilber
President, Los Angeles Trade and Technical College
Los Angeles, California

Mr. Wilber received his B.A. and M.A. from California State College at Los Angeles. He has served his college since 1932, as a faculty member, department head, dean, and since 1955, president. Mr. Wilber visited Russia in 1961 as a representative of the U. S. State Department. Presently he serves as a member of the California State Advisory Council for Vocational Education. Mr. Wilber is a member of several panels, including the Junior College Advisory Panel for California; the Southern California Industry-Education Council; and the Board of Directors, Goodwill Industries of Southern California.

AFTERNOON STUDY SESSIONS

Each of the seven afternoon study sessions will develop a written report identifying strategies for implementing the objectives of the institute. Each study group leader has been selected because of his competencies and experiences related to the objectives listed. A written report of each study group's recommendations will be submitted by the study leader for inclusion in the final report.

GROUP A

Leader: Professor Felician F. Foltman
New York State School of Industrial & Labor Relations
Cornell University

Recorder: Richard McCormack, Chairman
Business Management Division
Agricultural and Technical College, Delhi

Objectives:
(1) Learn to make manpower projections and develop techniques for making occupational surveys for program planning.

(2) Develop techniques for determining sufficient potential student population for the support of new programs.

GROUP B

Leader: Dr. Kenneth Doran, Associate Dean
Two-Year and Technical Colleges
State University of New York

Recorder: Seldon Kruger, Chairman
General Studies Division
Agricultural and Technical College, Delhi

Objectives:
(1) Identify and review exemplary post-high school programs.

(2) Identify criteria for determining when new complimentary programs should be added to the curriculum.

AFTERNOON SESSIONS (Cont'd)

GROUP C

Leader: President James Fitzgibbons
Hudson Valley Community College
Troy, New York

Recorder: Wilbur Farnsworth, Chairman
Agriculture Division
Agricultural and Technical College, Delhi

Objectives:

(1) Explore procedures for developing a balanced program for the student body.

(2) Determine ways of using local advisory committees to strengthen offerings.

GROUP D

Leader: President David Huntington
Agricultural and Technical College
Alfred, New York

Recorder: Darrell Singer, Acting Chairman
Construction Technology Division
Agricultural and Technical College, Delhi

Objectives:

(1) Examine staff requirements for new and complimentary programs added to the curriculum.

(2) Determine the type and degree of pre- and in-service training for vocational education programs.

GROUP E

Leader: President Murray Block
Manhattan Community College
New York City

Recorder: Richard Seguare, Chairman
Hotel, Restaurant and Institutional Management Division
Agricultural and Technical College, Delhi

Objectives:

(1) Explore the potential of cooperative work study programs for improving program quality and minimizing facility needs.

(2) Determine instructional methodology and innovation in techniques.

(3) Examine union-apprentice relationship and strategies for increasing cooperation.

AFTERNOON SESSIONS (Cont'd)

GROUP F

Leader: Mr. Lawrence E. Gray, Chief,
Bureau of Two-Year Colleges
New York State Education Department
Albany, New York

Recorder: Daniel Moskwa, Chairman
Vocational Education Division
Agricultural and Technical College, Delhi

Objectives:

(1) Examine facility requirements for programs in vocational education.

(2) Examine the utilization of multi-media presentations and the adaptation of "hardware" to the instructional program.

GROUP G

Leader: President Charles W. Laffin, Jr.
Agricultural and Technical College
Farmingdale, New York

Recorder: Robert Kopecek, Associate Dean
Student Personnel Services
Agricultural and Technical College, Delhi

Objectives:

(1) Identify strategies for accommodating students requiring housing facilities.

(2) Determine the counseling needs of students.

Institute participants will be assigned one of the study groups on a random selection basis to assure as broad a representation as possible in the compilation of the study report.

Group assignments will be indicated at the time of registration.

A NATIONAL INSTITUTE

"Improving Vocational Education in Post-High School Institutions"

AGRICULTURAL &
TECHNICAL COLLEGE
DELHI, N. Y.

June 22 - 27

U. S. OFFICE OF EDUCATION
COOPERATING

CONFERENCE PROGRAM

NATIONAL INSTITUTE
"Improving Vocational Education
In Post-High School Institutions"

Supported by U. S. Office of Education. A week long institute focusing on state and institutional strategies for developing, formulating and implementing improved post - high school vocational education opportunities.

Sunday, June 22:

1:00 p.m. -6:00 p.m. — O'Connor Hall
Registration: Pre-registered Delegates

1:00 p.m. -5:00 p.m. — Farrell Hall Lobby
Registration(Mon. -Fri.): General public

6:15 p.m. — MacDonald Hall
Dinner

8:00 p.m. — MacDonald Hall
Informal Reception
President William R. Kunsela, Host

Monday, June 23:

Earl Mac Arthur, Project Director, Presiding

9:00 a.m. — Farrell Hall, Little Theater
Conference Opens

9:10 a.m.
Greetings from Delhi Tech
Vice President William F. Kennaugh

9:20 a.m.
The Conference Plan

Monday, June 23 (Cont'd.):

9:30 a.m.
Institutional Presentation
Rockingham Community College
Dr. Gerald James, President

10:30 a.m.
Break

10:45 a.m.
Reconvene - Questions and Answers -

Participants are requested to question President James concerning any and all phases of the college operation.

12:15-1:15 p.m. — MacDonald Hall
Lunch

1:30 p.m. — Sanford Hall
Convene for Study Group Discussions.

Note your group assignment on your registration packet.

3:30 p.m.
End of Study Discussion

6:00 p.m. — Farrell Hall Gymnasium
Cocktails

7:00 p.m. — MacDonald Hall
Banquet
Presiding:
Sebastian V. Martorana
Vice Chancellor for Two-Year
& Technical Colleges, S.U.N.Y.

Address:
John W. Stahl
Director of Manpower
N.Y. Regional Office, U.S.O.E.
New York City

"Implications of the 1968 Vocational Education Amendments for Post-High Institutions"

Tuesday, June 24:

Presiding:

Dean B. Klare Sommers, Delhi Tech

9:00 a.m. Farrell Hall, Little Theater

Institutional Presentation
Washtenaw Community College
Dr. David Ponitz, President

10:30 a.m.

Break

10:45 a.m.

Reconvene - Questicns and Answers - directed to President Ponitz

12:15-1:15 p.m. MacDonald Hall

Lunch

1:30 p.m. Sanford Hall

Convene for Study Group deliberations

3:30 p.m.

End of Study Groups

3:45 p.m.

Bus to College Golf Course for those wishing to play golf.

7:00 p.m. MacDonald Hall

Dinner

-- Evening Free --

Wednesday, June 25:

Presiding:

~~Director~~ of Research and Planning
Peter C. Clifford, Delhi Tech

9:00 a.m. Farrell Hall, Little Theater

Institutional Presentation
State University Agricultural and Technical College, Alfred, N.Y.
Vocational Division
Mr. Donald Jones, Director

10:30 a.m.

Break

10:45 a.m.

Reconvene - Questions and Answers - directed to Director Jones

12:15-1:15 p.m. MacDonald Hall

Lunch

1:30 p.m. Sanford Hall

Study Group Discussion - to conclusion

7:00 p.m. MacDonald Hall

Dinner

-- Evening Free --

Thursday, June 26:

Presiding:

Dean of Students
Clarke G. Hoffman, Delhi Tech

9:00 a.m. Farrell Hall, Little Theater

Institutional Presentation
Los Angeles Trade & Technical Junior College
F. Parker Wilber, President

10:30 a.m.

Break

10:45 a.m.

Reconvene - Questions and Answers - directed to President Wilber

12:15-1:15 p.m. MacDonald Hall

Lunch

1:30 p.m. Sanford Hall

Reconvene Study Groups - to conclusion

6:00 p.m. Farrell Hall Gymnasium

Cocktails

7:00 p.m. MacDonald Hall

Banquet
Presiding:
Vice President William F. Kennaugh
Delhi Tech

Speaker:
Kenneth T. Doran
Associate University Dean for Two-Year and Technical Colleges

"Conference Wrap-Up - Expectations and Accomplishments"

Friday, June 27:

9:00 a.m. Sanford Hall

Study Groups, final session

10:30 a.m.

Break

10:45 a.m. Farrell Hall, Little Theater

Preliminary Report of Study Groups

12:15 p.m. MacDonald Hall

Lunch

* * *

All meals are served in MacDonald Hall dining center.

Breakfast	7:30-8:30 a.m.
Luncheon	12:15-1:15 p.m.
Dinner	As indicated

The Snack Bar is continuously open each day until 11:00 p.m.

Commercial exhibits are in the Farrell Hall Gymnasium for your viewing. They will be open each day 8 - 9 a.m., 12 - 1:15 p.m., 3:30-6 p.m.; Tuesday and Wednesday, 8 - 10 p.m.

All general morning sessions are held in Farrell Hall, Little Theater.

Study Group Sessions will be held in Sanford Hall. See your Registration packet for group and room assignment.

State University
AGRICULTURAL AND TECHNICAL COLLEGE
DELHI, NEW YORK 13753

May 26, 1969

Dear Director,

Re: National Institute

Delhi Tech with a supporting grant from U.S.O.E. is conducting a national institute, June 22-27, 1969, "Improving Vocational Education in Post-High School Institutions".

This national conference will have representatives from the 48 continental states engaging in discussions directed toward 16 conference objectives.

The enclosed materials describe the program and conference consultants participating.

We invite your participation and an application form is enclosed for your use.

Hope to see you in Delhi June 22.

Sincerely,

Earl W. Mac Arthur
Project Director

EWM:ald
Encs.

STATE UNIVERSITY
AGRICULTURAL AND TECHNICAL COLLEGE
DELHI, NEW YORK 13753

DIVISIONS
Agriculture
Business Management
Construction
General Studies
Hotel, Restaurant and Institution Management
Continuing Education

May 28, 1969

Dear

Delhi Tech is hosting the National Post-High School Vocational Education Conference in cooperation with the U.S. Department of Health, Education and Welfare. The conference scheduled for June 22-27, has as its theme "Improving Vocational Education in Post-High School Institutions".

Participants from state and local administrators of Post-secondary technical programs, directors of vocational education will assemble from 48 states (continental U.S.A.) for a week of concentrated study of the problems involved.

Our campus is planning an exhibit of Vo-Ed and particularly Technical strength. Because of the conference's national importance, we invite you to exhibit your campus in showing New York's total technical strength to the rest of the states.

If you are interested in participating, a space will be allocated for your exhibit in Farrell Hall Gym. Your exhibitors should contact Mr. Daniel Moskwa, Exhibit Coordinator National Vo-Ed Conference, Agricultural and Technical College at Delhi, Delhi, New York 13753 or phone 607-746-4118. We will provide room and board for your exhibitor at the conference.

The enclosed conference program will provide basic information, if you or any of your staff are interested in attending.

Sincerely yours,

Charles Albert
Assistant to the President

CA:ad
Encs.

State University
AGRICULTURAL AND TECHNICAL COLLEGE
DELHI, NEW YORK 13753

"Improving Vocational Education in Post High-School Institutions"

APPLICATION FOR ATTENDANCE
(To be used by those not requesting Grant Support under U.S.O.E. Grant #9-0329)

DEADLINE FOR RECEIPT MAY 24, 1969

Name _____ Title _____

Institution _____

Address: Street _____

City _____ State _____ Zip _____

Telephone: _____

I hereby make application to attend the above institute, June 22-27. It is my understanding that this application carries no stipend award under U.S.O.E. Grant #9-0329 and that I am responsible for my own lodging, subsistence and travel to and from Delhi, New York.

This application is accompanied by a fee of $75.00 for lodging and subsistence on the Delhi Campus, June 22-27, 1969.

Accommodations: Accommodations are college dormitories, two (2) persons in each room.

Accommodations desired:

_____ Double Room for me and my wife

_____ Double Room for me and _____
(Name of Roommate)

_____ I have no preference for a roommate.

Lodging and subsistence fee for wives is $50.00, payable at registration. (No lodging and subsistence is available for children.)

Optional additional transportation and entertainment charges will be necessary for parts of the women's program. Details will be supplied with the notification of acceptance.

Travel directions will accompany notification of acceptance for the institute.

_____
(Signature of applicant)

Return this application to: E. W. Mac Arthur
State University
Agricultural & Technical College
Delhi, New York 13753

Telephone: (607) 746-4151

State University
AGRICULTURAL AND TECHNICAL COLLEGE
DELHI, NEW YORK 13753

"Improving Vocational Education in Post-High School Institutions"

U.S. Office of Education Grant #9-0329

APPLICATION FOR GRANT SUPPORT
June 22 - June 27

DEADLINE FOR RECEIPT MAY 24, 1969

Name _____ Title _____

Institution _____

Address: Street _____

City _____ State _____ Zip _____

Telephone _____

I hereby make application for grant support under the terms of U.S.O.E. grant #9-0329 for lodging and subsistence, June 22-27 and round trip travel to Delhi, New York, such travel not to exceed rates for air coach, rail coach or private auto at 10 cents a mile. Reimbursement for travel will be made upon submission of appropriate vouchers and receipted bills during conference registration. No direct payments will be made for lodging and subsistence.

Accommodations: All accommodations are in college dormitories, two (2) to a room.

Accommondations desired:

_____ Double Room for me and my wife

_____ Double Room for me and _____
(Name of roommate)

_____ I have no preference for roommate.

Lodging and subsistence fee for wives is $50.00, payable at registration. (No lodging and subsistence is available for children.)

Optional additional transportation and entertainment charges will be necessary for parts of the women's program. Details will be supplied with the notification of acceptance.

Travel directions will accompany notification of acceptance for the institute.

_____
(Signature of applicant)

Return this application to: E. W. Mac Arthur
State University
Agricultural & Technical College
Delhi, New York 13753

Telephone: (607) 746-4151

STATE UNIVERSITY
AGRICULTURAL AND TECHNICAL COLLEGE
DELHI, NEW YORK 13753

DIVISIONS
Agriculture
Business Management
Construction
General Studies
Hotel, Restaurant and Institution Management
Continuing Education

May 28, 1969

Dear

We are pleased that your application has been accepted for the National Institute to be held on our campus, June 22-27, 1969.

We are enclosing travel directions which we trust will be of help to you in reaching Delhi, New York.

Also, enclosed is a ticket for use if you are flying and taking the Trailways Bus from Kennedy Airport to Delhi, and a card stating your flight time and request for play tickets which must be returned and in my office by June 7.

We are anticipating a stimulating conference and are looking forward to seeing you at Delhi Tech on the 22nd.

Sincerely,

Earl W. Mac Arthur
Project Director

EWM:ald

Encs.: Travel information
Ticket for transportation
Flight & play card to be returned

State University
AGRICULTURAL AND TECHNICAL COLLEGE
DELHI, NEW YORK 13753

May 29, 1969

Travel Directions

1. For those flying to the conference, please make your flight reservations to arrive at John F. Kennedy Airport in New York between the hours of: 12 n. and 5:00 p.m. Sunday, June 22.

   Charter buses will leave from PARKING LOT #3 - RED SECTION at 2:00, 3:00, 4:00 and 5:00 P.M. (You can get to the lot via the free terminal buses). THESE WILL BE THE ONLY BUSES PROVIDED.

   Student guides will be at the buses to assist you.

   Please show the enclosed ticket to the guide.

2. EASTERN U.S. delegates from Delaware, District of Columbia, Maryland, Pennsylvania, New York, New Jersey, and all New England should plan to travel by automobile since air connections and bus connections are not convenient.

3. From New England - Massachusetts Pike to New York Thruway to exit 30, South, Route 28 at Mohawk, New York to Delhi, New York.

4. From Vermont - Interstate 87 at Glens Falls to Albany; U.S. Route 20 to New York Route 7 to Richmondville, New York - Route 10 to Delhi, New York.

5. From Maryland, Delaware, Pennsylvania, New Jersey, and District of Columbia - Interstate 95 to New Jersey Turnpike, to Garden State Parkway to New York State Thruway to Kingston, New York exit - Right on Traffic circle to New York Route 28 North to Delhi, New York. OR

6. Interstate 83 to Harrisburg, U.S. 22 to Allentown, N.E. Ext. Pennsylvania Turnpike to Clarks Summit exit to Interstate 81 to interchange with New York Route 17 East. Route 17 East to exit 84 at Deposit, then to New York Route 10 to Delhi, New York.

7. For those who cannot make connections as outlined above--get a Pine-Hill Trailways bus to Delhi from the Port Authority of New York Terminal, 8th Avenue and 41st Street, New York City (Manhattan, phone WIsconsin 7-3500) Monday-Friday at 8:30 a.m. or 3:30 p.m. and Sunday at 8:30 a.m.

6/69
State University (13)
Agricultural and Technical College
Delhi, New York 13753
Charles Albert
Assistant to the President
Phone: 607-746-4176

TECH NATIONAL

INSTITUTE PROGRAM

SET

FOR IMMEDIATE RELEASE:

Delhi -- The National Institute program, "Improving Vocational Education in Post-High School Institutions" has been set for June 22-27 on the State University Agricultural and Technical College Campus at Delhi, New York. The Institute supported by U. S. Office of Education will focus on state and institutional strategies for developing, formulating and implementing improved post-high school vocational education opportunities.

Registration of the pre-registered delegates will begin at 1:00 p.m., Sunday, June 22. General public may register at 1:00-5:00 p.m. on Monday through Friday, June 23-27. Sunday evening, 8:00 p.m., June 22, President William R. Kunsela will hold an informal reception in MacDonald Hall dining center.

The working conference will begin on Monday at 9:00 a.m. in the Little Theater when Dr. Gerald James, President, Rockingham Community College, North Carolina delivers his institutional presentation. Other notables who have distinguished vocational education programs such as Dr. David Ponitz, President, Washtenaw Community College, Ann Arbor, Michigan; Mr. Donald Jones, Director, Vocational Division, Agricultural and Technical College, Alfred, New York; and Mr. F. Parker Wilber, President, Los Angeles Trade and Technical College, California, will make similar presentations on succeeding days.

(more)

Evening banquets at 7:00 p.m. on Monday and Thursday of the week will have Sebastian V. Martorana, Vice Chancellor for Two-Year and Technical Colleges, State University of New York, and William F. Kennaugh, Vice President of Delhi Tech as presiding officers. The guest speakers for the banquets will be John W. Stahl, Director of Manpower, New York Regional Office, U.S.O.E., who will speak on "Implications of the 1968 Vocational Education Amendments for Post-High Institutions", and on Thursday, June 26, Dr. Kenneth T. Doran, Associate University Dean for Two-Year and Technical Colleges, State University of New York, will deliver "Conference Wrap-Up - Expectations and Accomplishments".

Every afternoon is devoted to study group discussions based upon presentations given by the morning consultants. Friday, June 27, the preliminary report of study groups will be made in the Little Theater at 10:45 a.m. Group discussion leaders are: Professor Felician F. Faltman, New York State School of Industrial and Labor Relations, Cornell University; Dr. Kenneth Doran, Associate Dean, Two-Year and Technical Colleges, State University of New York; President James Fitzgibbons, Hudson Valley Community College, Troy, New York; President David Huntington, Agricultural and Technical College, Alfred, New York; President Murray Block, Manhattan Community College, New York City; Mr. Lawrence E. Gray, Chief, Bureau of Two-Year Colleges, New York State Education Department, Albany, New York; and President Charles W. Laffin, Jr., Agricultural and Technical College, Farmingdale, New York.

(more)

The final report of the conference will be a compilation of the conference proceedings containing introductory remarks and edited transcripts of speeches, detail recommendation reports of the study groups, evaluation reports and regional evaluation reports.

Interested individuals are cordially invited to attend and may participate in the discussion groups. Information concerning costs and lodging may be obtained by writing: Project Director, Vo-Ed Conference, Administration Building, State University Agricultural and Technical College, Delhi, New York, 13753, or phoning 607-746-4151.

--30--

State University
AGRICULTURAL AND TECHNICAL COLLEGE
DELHI, NEW YORK

PARTICIPANTS AT NATIONAL INSTITUTE
June 22-27, 1969

CONSULTANTS

Dr. Gerald James, President
Rockingham Community College
Wentworth, North Carolina

Dr. David Ponitz, President
Washtenaw Community College
Ann Arbor, Michigan

Mr. Donald Jones, Vocational Division
Agricultural and Technical College
Alfred, New York

Mr. F. Parker Wilber, President
Los Angeles Trade & Technical College
Los Angeles, California

STUDY GROUP LEADERS

Professor Felician F. Foltman
N. Y. S. School of Industrial & Labor Relations
Cornell University
Ithaca, New York

Dr. Kenneth Doran, Associate Dean
Two-Year and Technical Colleges
State University of New York
Albany, New York

President James Fitzgibbons
Hudson Valley Community College
Troy, New York

President David Huntington
Agricultural and Technical College
Alfred, New York

Mr. Clarence Becker
Nassau County - BOCES

Mr. Lawrence E. Gray, Chief
Bureau of Two-Year Colleges
New York State Education Department
Albany, New York

President Charles W. Laffin, Jr.
Agricultural and Technical College
Farmingdale, New York

ARIZONA

Gordon L. Snowbarger
Dean of Occupational Education
Arizona Western College
P. O. Box 929
Yuma, Arizona 85364

ARKANSAS

Shirrell K. Halbrook
Assistant Director & Counselor
Pines Vocational Technical School
2220 West 18th Avenue
Pine Bluff, Arkansas 71601

Hoyle Mann
Director of Instruction
Southwest Technical Institute
Box 45
Camden, Arkansas 71701

CALIFORNIA

Glen R. Guldberg
Dean of Vocational & Technical Educ.
Citrus College
18824 East Foothill Boulevard
Azu a, California 91702

Raymond E. Hernandez
Consultant, Industrial Education
The California Community Colleges
Bureau of Vocational-Technical Educ.
1111 Jackson Street, Room 4075
Oakland, California 94607

C. Allen Paul
Dean of Technical-Vocational Educ.
Grossmont Junior College
8800 Grossmont College Drive
El Cajon, California 92020

CONNECTICUT

Dr. Louis H. Schuster
Dean of Faculty
Mattatuck Community College
236 Grand Street
Waterbury, Connecticut 06702

DELAWARE

Lloyd R. Humphreys, Associate Director
Delaware Technical & Community College
P. O. Box 897
Dover, Delaware 19901

DISTRICT OF COLUMBIA

Gary D. Thomas
Program Officer, Program Planning
D/HEW - Office of Education
Bur. of Adult, Voc. & Library Programs
7th & D Streets, SW.
Washington, D. C. 20202

FLORIDA

Robert C. Anderson, Director
City Center of Learning
Pinellas County School Board
850 - 34 St., South
St. Petersburg, Florida 33712

H. Dean Griffin, Director
Vocational-Technical Education
South Florida Junior College
P. O. Box 1057
Avon Park, Florida 33825

Frederic L. Howell, Director
Vocational and Technical Education
Chipola Junior College
Marianna, Florida 32446

ILLINOIS

Clement Bogaard, Supervisor
State of Illinois
Board of Vocational Education & Rehabilitation
1000 Garden Avenue
Geneva, Illinois 60134

William T. Gooch
Dean of Technology
College of DuPage
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Ronald F. Marlier, Director
Placement & Vocational Guidance
Sauk Valley College
R. R. #1
Dixon, Illinois 61021

INDIANA

Robert Lyons, Assistant Director, Career Div.
Vincennes University
Vincennes, Indiana 47591

IOWA

Alfred T. Ploeser, Consultant
Department of Public Instruction
Grimes State Office Building
Des Moines, Iowa 50319

KANSAS

Deane T. Banker, Assistant Director
Industrial Education
Hutchinson Community Junior College
1300 North Plum
Hutchinson, Kansas 67501

KENTUCKY

John M. Adams, Jr.
Regional Superintendent
Harlan Area Vocational School
P. O. Box 936
Harlan, Kentucky 40831

MAINE

Richard N. Cilley, Assistant Director
Northern Maine Vocational Technical Institute
33 Edgemont Drive
Presque Isle, Maine 04769

MARYLAND

Frederick F. Otto
Dean of Community Services
Hagerstown Junior College
751 Robinwood Drive
Hagerstown, Maryland 21740

MICHIGAN

Oliver H. Koski
Dean of Voc-Tech Programs
Gogebic Community College
Ayer Street
Ironwood, Michigan 49938

John Schwetz, Dean
Technical-Vocational Curriculum
West Shore Community College
101½ N. Main
Scottville , Michigan 49454

MINNESOTA

Wendell Howard, Director
Area Technical Institute
835 - 8th Street
Granite Falls, Minnesota 56241

MISSOURI

Carlo A. Simeolo
Dean of Instruction
Florissant Valley Community College
3400 Pershall Road
Ferguson, Missouri 63135

Don C. Simmons, Assistant Director
Vocational - Technical Education
Springfield Area Vocational Tech School
815 N. Sherman
Springfield, Missouri 65802

Roy G. Willows, Director
Area Vocational-Technical School
Columbia Public Schools
1104 N. Providence Rd.
Columbia, Missouri 65201

NEBRASKA

Robert P. Harrington
Dean of Instruction
Central Nebraska Technical College
Box 1024
Hastings, Nebraska 68901

NEW JERSEY

Michael Fichera
Assistant Director of Technical Education
New Jersey State Department of Education,
Division of Vocational Education
225 West State Street
Trenton, New Jersey 08625

NEW MEXICO

Louis E. Saavedra, Principal
Albuquerque Technical-Vocational Institute
525 Buena Vista Se
Albuquerque, New Mexico 87106

NEW YORK

Herbert T. Barnard, Director
Certificate Programs Division
Hudson Valley Community College
80 Vandenburgh Avenue
Troy, New York 12180

Basil Cooil, Graduate Student
N. Y. S. School of Industrial & Labor Relations, Cornell University
561 Chenango Street
Binghamton, New York 13901

Edward Dougherty
Dean of Instruction
Broome Technical Community College
Binghamton, New York 13900

Eugene Masucci, Director
Occupational Education
BOCES, Suffolk County
201 Sunrise Highway
Patchogue, New York 11772

Miss Janet E. Popp, Associate
Bureau of Home Economics Education
State Education Department
Albany, New York 12224

Michael J. Reynolds
Assistant Vice Chancellor for Evaluation & Accreditation
Central Administrative Staff
State University of New York
8 Thurlow Terrace
Albany, New York 12201

E. A. Smith, Director
Occupational Education Program
Western Delaware Area
BOCES
Miller Avenue Building
Walton, New York 13856

Harold Wassmer
Associate in Industrial Education
New York State Education Department
Albany, New York 12224

Eugene P Whitney
Associate in Business Education
New York State Education Department
Albany, New York 12224

NORTH CAROLINA

A. S. Bevacqua, Education Director
Department of Community Colleges
Education Building
Raleigh, North Carolina 27602

Kenneth Oleson
Assistant Education Director
Department of Community Colleges
Education Building
Raleigh, North Carolina 27602

OHIO

D. R. Purkey, Supervisor
Technical Education & Construction
State Department of Education
65 S. Front
Columbus, Ohio 43015

OKLAHOMA

J. Barry Ballard, Director
Vocational-Technical Education
Northern Oklahoma College
1220 East Grand
Tonkawa, Oklahoma 74653

John W. Talbott
State Supervisor of Technical Education
State Department of Vo-Tech Education
1515 W. 6th Avenue
Stillwater, Oklahoma 74074

OREGON

Donald M. Gilles, Director
Planning & Special Projects
Division of Community Colleges and Vocational Education
State Department of Education
Salem, Oregon 97310

Albion Ringo
State Director of Vocational Education
State Department of Education
305 Public Service Building
Salem, Oregon 97310

PENNSYLVANIA

E. Jerome Kern
Community College Technical Advisor
Bureau of Community Colleges
Department of Public Instruction
P. O. Box 911
Harrisburg, Pennsylvania 17126

PENNSYLVANIA

Richard Skinner
Assistant, Academic Dean
Bucks County Community College
Swamp Road
Newton, Pennsylvania 18940

TEXAS

Gale N. Neff
Coordinator of Technical-Vocational Programs
Tarrant County Junior College
1400 Fort Worth National Bank Building
Fort Worth, Texas 76102

Don Yarbrough
Vocational Counselor
South Plains College
Levelland, Texas 79336

UTAH

D. A. Blackham, Supervisor
Utah Technical College at Salt Lake
4600 South Redwood Road
Salt Lake City, Utah 84107

Roger B. Honeyman
Utah Technical College at Provo
1400 No. 120 East
Provo, Utah 84601

VERMONT

Spencer M. Wright, Director
Adult (and Post-Sec.) Education
Burlington High School
52 Institute Road
Burlington, Vermont 05401

WEST VIRGINIA

Nathan L. Breed
Director of Associate in Applied Science
Programs Center
West Virginia University
3108 Emerson Avenue
Parkersburg, West Virginia 26101

L. S. McKinney, Director
James Rumsey Vocational Technical Center
515 West Martin Street
Martinsburg, West Virginia 25401

WISCONSIN

John R. Plenke, Program Administrator
Division of Occupational Services
Wisconsin Board of Vocational, Technical
and Adult Education
137 East Wilson Street
Madison, Wisconsin 53703

Jack W. Smythe, Program Administrator
Division of Educational Development &
Special Services
Wisconsin Board of Vocational, Technical
& Adult Education
137 East Wilson Street
Madison, Wisconsin 53703

Henry A. Wallace, Jr.
Student Services Supervisor
Northeast Wisconsin Technical Institute
200 South Broadway
Green Bay, Wisconsin 54303

Lyle H. Wandrei
Technical Education Supervisor
District #1 Technical Institute
620 West Clairemont Avenue
Eau Claire, Wisconsin 54701

NATIONAL INSTITUTE
IMPROVING VOCATIONAL EDUCATION
IN POST-HIGH SCHOOL INSTITUTIONS
June 22-27, 1969

CONFERENCE EXHIBITORS

COMPANY	REPRESENTATIVE
1. South-Western Publishing Company 512 North Avenue New Rochelle, New York 10802	Edward VanDerbeck Robert Nesbit
2. McGraw Hill Book Company Vo-Tech Division Heightstown, New Jersey 08520	Max E. Tillson
3. Philco Ford Corporation Education and Technical Services Division 515 Pennsylvania Avenue Fort Washington, Pennsylvania 10934	Vincent Zemaitis
4. Monroe International Inc. 117 Oneida Street Oneonta, New York 13820	Frank LaRussa
5. American Technical Society 848 East 58th Street Chicago, Illinois 60637	M. S. Bagby
6. Delmar Publishers, Inc. Mountainview Avenue Albany, New York 12201	E. A. Fink
7. Chronicle Guidance Publications, Inc. Moravia, New York 13118	Dr. James Hatch
8. International Business Machines 34 Reynolds Street Oneonta, New York 13820	G. A. Biblin
9. McGraw Hill Book Company Gregg Division Heightstown, New Jersey 08520	Larry Gardener
10. R. E. Vowell Company 275 Warren Avenue Rochester, New York 14618	R. E. Vowell
11. Sweda Division of Litton Industries Binghamton, New York 13901	Jack Weiss

COLLEGES	REPRESENTATIVE
1. Alfred Agricultural and Technical College	Orville W. Johnson
2. Cobleskill Agricultural and Technical College	Sam Pendrick
3. Broome Technical Community College, Binghamton	E. F. Dougherty
4. Delhi Agricultural and Technical College	Vocational Education Divisior
5. Canton Agricultural and Technical College	Mr. Nevaldine
6. Delhi Agricultural and Technical College	Admissions Office

STATE UNIVERSITY
AGRICULTURAL AND TECHNICAL COLLEGE
DELHI, NEW YORK 13753

DIVISIONS
Agriculture
Business Management
Construction
General Studies
Hotel, Restaurant and Institution Management
Continuing Education

July 15, 1969

Dear Conference Participant,

I trust you arrived home safely and that the remainder of the summer will be both enjoyable and profitable.

Presently we are transcribing all the material of the institute and preparing the copy for the final report. In regard to the final report, our contract calls for the production of 15 copies. However, we will compile enough for each person attending at a nominal charge. We'll let you know when the report is finished and available, probably in the early fall.

For those who inquired, we will make available video tapes of the proceedings at cost plus mailings.

The whole series of tapes; James, Ponitz, Jones, Wilber, Stahl and Doran involves 11 tapes. Each major speaker requires three tapes.

If you wish copies, please send us a blank tape--

Memorex 79P ON7084B - W3
ME 56949. A24e
1 x 3000

This is 1" helical scan tape, recorded on an Ampex 7500 machine. Helical scan tape cannot be spliced.

Please allow sufficient time for mailing, copying and returns.

To clear up misunderstanding about advanced notification and the conference content: An original announcement of the program was mailed to each State Director of Vocational Education on April 24. A subsequent mailing of the complete program was sent to the same person on May 7 with a follow-up memo.

Each accepted participant was sent a complete set of materials June 1 with travel instructions.

Nomination of participants was the prerogative of the State Director of Vocational Education. Since the quota of the conference was not meet, all applications were accepted by this institution.

I hope this clears up any misunderstanding.

Sincerely,

Earl W. Mac Arthur
Project Director

EWM:ald